

The
National Collegiate Track Coaches Association

1938
Proceedings
of the
Twelfth Annual Meeting

held at the
University of Minnesota
Minneapolis

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MORNING SESSION

June 16, 1938

The annual meeting of the National Collegiate Track Coaches Association, held at the University of Minnesota, June 16, 1938, convened at nine-forty-five o'clock, Mr. F. P. Johnson, of Drake University, President of the Association, presiding.

PRESIDENT JOHNSON: I want to welcome you all to this gathering which must be about our seventh or eighth annual Convention, if we may call it that. I am rather proud of the progress that the Association has made in the seven or eight years that we have had regular meetings and since George Bresnahan expanded upon the idea of sending the notes of our meetings to all members. Many of our members, of course, cannot be here today, just as many of us would not be present if our meeting were held in some other part of the country, but we do get to them all with the material discussed in these meetings, through the notes which are printed and sent to everyone.

Since our discussion of the routine and somewhat less interesting matters will take place in the business session which will come this afternoon, I think we may as well get started on the first discussion today, which will be the "Middle Distance Runs," specifically, the quarter and the half, as we usually think of them.

The gentleman who will lead the discussion is Hermon Phillips of Purdue University, who was a member of the Butler University team, and also a member of the Olympic Team in 1928. A successful coach at Butler and Purdue, he is very well qualified to take care of this subject. Mr. Phillips.

MIDDLE DISTANCE RUNNING

MR. HERMON PHILLIPS: As far as the quarter and the half are concerned, I think that I am no better qualified to

talk to a group of you fellows who have had more success than I, than anyone else. I used to run the quarter and the half, but it seems that the events we compete in ourselves, we have the least success in. It has been that way with me. During my six or eight years of coaching, I have not had a quarter-miler, with the exception of one or two, who could do under 50 seconds. I think the half and the quarter have changed so much, you would hardly recognize those of 10 years ago. At that time, we always considered these runs, especially the quarter-mile, as more or less a relaxed race, where you had to have a rest period in it, along the line, or you could not run it right.



Hermon Phillips, Purdue University

I believe that we are getting away from that more and more, because the time is much faster. It is necessary to more or less sprint the quarter, as the 220 always has been sprinted. A few years ago we always ran 100 yards in the quarter to get position, then we rested or relaxed in our running, and tried to "kick" the last 50 or 60 yards. During the last two or three years, with these boys running down around 47 seconds, I cannot see any place where they have a chance to do any resting.

In my estimation there are really two types of quarter-milers. One is the tall, long boy like Woodruff (Pittsburgh) and the other is the one who has to go full speed all the way and depend on strength. I think the big fellows, and even the tall thin boys who are still in the long class, are stride runners. They must depend on relaxation and the long stride. The short, stocky runner, or the sprint type of runner depends on strength to get there. The one thing I can contribute toward quarter-mile running that might be of interest to you is the fact that it seems to me a quarter-

miler, to be any good, must learn to run more on the balls of his feet. I think that it is necessary to run nearly as high in the quarter as it is in the 220. That is speaking from my own experience.

Some of you may have noticed a runner (Howells) at Ohio State. He runs pretty high, I believe. He is more or less a sprint type runner and he must depend on a lot of "bound" in order to get the proper stride. Some of you who have seen Woodruff run realize that he is the opposite type. He does not put much effort in his running. He runs with a long, easy, graceful stride, if you can call his running graceful. Still, he gets there and does not seem to use the effort that we see in the other types.

Quarter-mile running has developed, in my estimation, into more or less the same thing as we had ten years ago in the 220. It is a relaxed fast sprint. It is a sprint when you get under 47 seconds.

The half-mile is a little different. This is run like the quarter used to be. We start and then sprint a little way for position. Then we relax and stride and finish as fast as we can. We are now running the half under 1.52 pretty consistently, and when we realize, that ten years ago, the record was 1.52 and a fraction, we can see what we are coming to.

The half seems to me more or less of a conditioning affair, as long as you have a fellow with enough speed. Conditioning, rather than any particular thing you can teach him in regard to stride, is the important thing.

All running is a question of relaxation, rhythm, and endurance. If you can develop endurance, you can develop rhythm and relaxation. You cannot develop reaction. If they do not have some reaction you have very little to start with. That is the reason your sprinters improve least of all. The other day some fellow told me of a good high school sprinter. I said that if he could run 9.7 I would like to see him. (Laughter) You cannot improve a sprinter. I have not seen many of you fellows improve them. Generally speaking, your sprinters are good when you get them.

In the half, where we get the distance, the over-distance can be worked on. I for one am pretty much in favor of quite a bit of over-distance work for a half-miler and up to a miler. These half-

milers can usually run a good mile. Now and then, you find the other type, who are quarter-milers changing to the longer distance.

I am not really familiar with what has taken place here in the past two or three years, because I have not been able to attend the meetings. I would like to open the subject for discussion and see if we cannot get you fellows to contribute to the topic. You are probably as well qualified as I am.

ED HAYNES (Denver University): What is your regular quarter-mile workout?

MR. PHILLIPS: You fellows all have a set schedule, more or less, in the back of your minds, according to the individual, and according to the way he looks; but to start with on Monday, we take a pretty fair workout—loosening up the muscles—running perhaps as much as a mile and a half. Then we run through a 300 yard dash at three-quarter pace, or a good fast striding pace. Tuesday we do sprint work—three 220's. Then we take a half-mile on loosening up—a little over-striding. Wednesday we have time trials. That is not customary with everybody, but I usually have time trials on Wednesday at the distance. Thursday we do very little—loosening up and getting the muscles straightened out a little bit. Sometimes we do a little sprinting. Friday we never touch the track, except to run around getting the digestive system in order. This makes you feel like you had a little workout. That usually makes up a quarter-miler's workout for a week as far as I am concerned. We vary on that. Some think that a lot of work is necessary. That is debatable, I think.

RALPH YOUNG (Michigan State): Do you race them in the half-mile on Wednesday?

MR. PHILLIPS: If the boys run a half-mile, I usually race them in it. I race them against a watch, but that does not mean they are running wide open. For instance, if a boy is capable of doing 1.54- $\frac{1}{2}$, I try to get him to do 1.59 on Wednesday. I always have them do a little finishing. I try to get them to "kick it."

B. H. MOORE (Louisiana State): What do you mean by reaction?

MR. PHILLIPS: Reaction is the time element between the time the brain says

go, and the time you move the muscles. That is what I would call reaction.

FRED TOOTELL (Rhode Island State): Do you have any trouble with the boys who run a little bit high in the quarter, trying to carry that high running into the half and tying up a little bit?

MR. PHILLIPS: I have not had a lot of trouble because I think the half is slowed up just enough so that the tying up process does not take place so much. We do not tie up much in the half, because of a little slower pace.

MR. TOOTELL: I had a boy this year running a little high and he consistently tried to carry the high running into the half, and had a lot of trouble getting down. He dropped his feet a little bit so he would not be up there so high. His legs were tied up pretty bad.

MR. PHILLIPS: It seems to me that it is hard to say just when a boy is going to tie up, or whether he is or is not. I had a youngster who was very mediocre to start with. He was short and stocky and looked like a fellow who was going to tie up. I ran him in a couple of relay races late in the season and he never tied up. That boy is the type that looks like he is going to tie up any minute. He did not have much practice, work or background.

Then there is the individual who is going to tie up on you. It is more or less of a mental condition along with being able to handle yourself. I think these boys can control that tying up. What I mean by that is they know they are going to tie up if they cannot relax. They have to learn to relax through relaxing. It comes more or less naturally. You must tell him that he has to get hold of himself. Unless he does he is not going to be a great runner in those distances over 220, where he has to think only a little bit. Any boy in the quarter-mile, when he gets tired—and they do get tired—has trouble with his knees going out. They should hold those knees in and not toe out. If they will just think of that one thing they will be a lot better runners. They will win a lot of races. Fellows who are only average runners win a lot of races by thinking near the end of the race. When you are tired physically you are tired mentally; but if you can impress on them that they must have control of themselves all the

time and not just run pell-mell without doing any thinking, they will improve.

MR. TOOTELL: Do you not think that a lot of that tying up is due to breathing? I had a boy whom I worked with for three years, and he tied up in every race. I found out in his case, that as soon as he started to put on the finishing drive, he stopped breathing. As soon as he did that, he tied up. The only way I got him out of it, was to tell him not to sprint, but instead to reach out in the last part of the race. When he did that, he kept on breathing. Then he came in all right.

MR. PHILLIPS: You mean he actually quit breathing?

MR. TOOTELL: He held his breath. That cut down his normal stride.

MR. PHILLIPS: That is news to me, but it is a very interesting angle.

MR. ROBERT SIMPSON: I had a boy one time who was a sprinter, and after a 100 or 220 yard race he would be all in. He could hardly walk at the end of the race. I tried everything. I never thought about this boy trying to hold his breath through the 100, let alone the 220. But, that was what he was trying to do. He would not be able to walk for a half hour after the 220 race. He would almost pass out altogether. I got to talking to him and I found out he was trying to hold his breath for the full 220. They almost needed a pulmotor out there. I got him to breathing that same year. He went to the National Collegiates and placed in both the 100 and the 220, just by breathing.

MR. PHILLIPS: That is interesting. I tell my boys to breathe the best they can, but breathe—get all they can in there. It is essential.

MR. SIMPSON: He told me his previous coach told him to hold his breath in the 100, so he thought it was the same in the 220. (Laughter)

MR. PHILLIPS: I sometimes think that rhythmic breathing is good in the runs if you can do it, but the change of pace as you start to go around might break your rhythm all up. That is the only objection to it. I had a boy who recited poetry to himself as he ran. That was a new one as far as I was concerned. It would be a good idea though, if he could recite a poem to himself. He would be able to forget about running and think

about something else. In all races a certain amount of rhythm is necessary.

MR. N. A. MERRIAM (University of Chicago): How can I get the boys to thinking about the race, when after the race is over, they cannot remember what happened?

MR. PHILLIPS: I think you are right. Some don't think and I'm not sure what we can do.

MR. MERRIAM: I can remember years afterwards what happened in the races I entered. I cannot understand how a boy can go through a race and not know anything about it. Their minds are a blank.

MR. PHILLIPS: I think sometimes we run into blanks anyhow.

MR. MERRIAM: The nervous tension paralyzes their thinking ability, apparently.

MR. PHILLIPS: I believe sometimes this mental end of it is very important, even more than the physical end of running. I think if the fellow is brought along right mentally in these longer runs, that that is the biggest end of it. I think, too, that the man has a tendency in any race to get tired physically, and it affects his mental side. I know from the scientific angle it does not affect your thinking, but I remember when I was running. I could not even think straight, let alone run straight. I think it does affect your mentality, and if you had somebody over about that three-quarter post that could pick a man up and put him in his place, he would be a lot better.

Does anyone have any evidence on that?

MR. MOORE: What is your idea on variations for the quarter and the half—for the first and second quarters as to time?

MR. PHILLIPS: That is rather hard to discuss, because the 880 has been run differently, so much that we have begun to believe that it is better to run the first quarter slower than the second. Cunningham runs the first half-mile slower than the second one. I always thought that the first quarter of a half-mile should be at least two seconds faster than the last. I turn around and find one boy running a 54 quarter for the

first quarter of the half, and breaking a record. Then you have a tendency to believe that maybe a 54 quarter is the correct quarter, but you take the same boy running a 56 quarter and breaking the record and you think that is correct.

MR. MERRIAM: It comes from two to four seconds faster in the first half in the big races. But, you cannot figure like that in all races. It is not rock-bound at all.

MR. PHILLIPS: I feel too, that if it is true in the mile that a fellow should even those up more, it is probably true in the half mile.

MR. MOORE: In this half-mile race between Robinson and Woodruff (at Dallas, 1937) Robinson's, as well as I could catch it, was under 53 on that half. Woodruff came up and beat him at the finish in about 1:48.

MR. HAYWARD: The track was about 7 feet short.

MR. PHILLIPS: We are dealing there with an unusual man, rather than with the average. We have to think about Robinson and a few of those instead of Woodruff. Woodruff is a little out of the class of some of these boys as far as physical ability is concerned. That is just like taking a giant as an example in the shot put against a fellow who is a midget.

MR. MOORE: Getting back to this quarter, a lot of these quarter-milers like to do this 300 wide open. A lot of them like to take it easy and sprint in. Do you try to standardize that in all your quarter-milers?

MR. PHILLIPS: No. It depends on how they are on ability or how they react to certain things. A short, stocky fellow, if he tried to take it easy the first 220 yards, would be 35 yards behind, because what is hard for him is easy for someone else. He has to sprint the whole distance. It is not a question of sprinting 300 yards. It is a question of sprinting 440 yards. We sometimes find a fellow like that. You remember Carr of Pennsylvania. He never did just a sprint, but he ran all the way. That is the reason he was successful; and in beating these other fellows, he seemed to be able to run perfectly relaxed. He could run, as fast as he could sprint—21.6. He never could sprint any faster than that.

If a person is relaxed, he runs just as

fast as when he is sprinting. I know Johnson (Columbia '38) is a sprinter, and he said he did not learn to run until a couple of years ago. I think Nicholson will vouch for that. He found he could cut off time in the 100 by relaxing. Jesse Owens was like that.

MR. MERRIAM: I think a good example of that is found in the preliminary heats.

MR. PHILLIPS: At the Intercollegiates, we had a pretty good example. I do not think any of the boys looked quite as good in the finals as in the preliminaries. The weather was practically the same, but when you get two races within two or three hours, it tells on some of them a little bit more than others.

You take a boy and run him in the relays, and he will run a lot faster than in a straight race. He has a little different attitude. He will run as fast as he can. He feels that if he does not get in, he is going to lose ground for the boys. He takes a chance and runs more relaxed than ever.

At the Drake Relays about three years ago, a high school boy's pants started to come off with about three-quarters of a lap to go. He started to pull his pants up and then ran for about 100 yards. He ran like that all the way in—pulling his pants up and running. He finished with a 50 yard lead. The following year he had his pants up with suspenders, I think so he would be sure they would not come off (laughter) and we watched him. He did not have a "kick." He was thinking about running rather than pulling his pants up.

If I thought that helped, I would put a pair of loose pants on some of my boys once in awhile. That is a question of mental attitude.

MR. CLYDE LITTLEFIELD (University of Texas): What is the method used to teach a man to run relaxed?

MR. PHILLIPS: Hold the arm out tense, real tight, with the fingers clenched, and try to move the arm. (He took that position) You see what it does to it. It will not move. The first thing you have to do is to loosen the arm first, then move it. If you can get a fellow to see that, that is the first thing you have to do. Make them realize the reason for

a thing. That is the first principle of coaching. Tell a fellow why you are doing anything. Second, get him to do it. As far as relaxing is concerned, I think a good example is change of pace. That causes lots of our boys to tie up. They get in a race, and they go faster than in practice. Relaxed speed work is the best thing for that. I think you can do that by telling them to keep control of themselves and realize what they are doing.

MR. LITTLEFIELD: I give them a lot of relaxed distances, speed work, running three or four speeds and then give them wind sprinting—sprint, trot a little, and pick up.

MR. NICHOLSON (Notre Dame): I think lots of this relaxed business is up to the boy. All of them do not do it. You see a quarter-miler run with his wrists dangling, the chances are he is relaxed there, and every part of him is relaxed. It will work out with 75 per cent of the men. It seems to tie the others up. To me, it is a matter of the individual boy.

MR. PHILLIPS: Some of you have seen moving pictures of these runners—the way they breathe. Some of them will be breathing relaxed. The muscles in their face are loose. I tried to show my boys pictures and tried to tell them that that is part of the relaxation. I have one boy who can do that fine, but he still cannot run. (Laughter) I do not know whether it is any good or not.

If there are no other questions, I think you can take over, Mr. Johnson. (Applause)

PRESIDENT JOHNSON: Thank you very much Hermon.

Gentlemen, now we will have a discussion of "Training Principles" which subject can be treated long and earnestly, not that we expect to take a lot of time on it, but there are a lot of things that may be considered in such a subject which we do not usually touch.

We hope that today, Clyde Littlefield of Texas can lead us into that field and give us a lot of good ideas. Clyde, will you come up here; and I want you to feel free to call on anyone that might be able to assist you in this presentation.

TRAINING PRINCIPLES

MR. LITTLEFIELD: The President has asked me to talk about principles of training. Some of the points he wanted me to consider in this discussion are, diet, sleep, activities of competitors on the day before the meet, effects of different modes of travel, warming up, working out alone, use of the stop watch, and mid-week time trials, and so on.

I do not think we can discuss all of these very fully with the time we have allotted, but as we go along, if each one will ask questions or suggest things to talk about, I believe it will be the better plan. From my experience, I have learned to coach from listening to the coaches who have had experience, from the experience I have had myself and by reading books that coaches have been able to publish on track and field athletics. I think at these meetings is the place where we develop our profession. It is a place where we are all willing to give any information that will help us progress.

In the principle of training, I have always thought about charting the progress of the development of a man, and I always took into consideration some of the things, like speed, skill, condition, nerve, and knowledge. Some of those things we can measure and some we cannot, and that is why I say that all individuals have to be trained a little differently.

We were talking a little while ago, about the different methods of running the 440 and the half-mile. We cannot train men the same. Some of those men are different physically. They have been eating different food when growing up, therefore, I do not believe we can train them all the same. I have often thought about the statement—muscle power varies with the intensity of the stimulus. What I mean by that is, if you can get

your men to use their power in the right way, with a "want-to-do" spirit, they are going to bring home results. The cultivation of skill and interest in development is necessary. That is true in the shot put

or any other event if a man can put his power and strength into those events at the right time and place. If he does this, he is going to get the best results, and that is the thing I have always thought about when I am training a man. Get him to do this event in such a way that he will use the muscle power in his body—all that he has—to get the best results. That has been my study of track and field athletics.

As for diet, I do not know what you men think. Several years ago we thought differently about what an athlete should eat. We

used to be very careful about what our boys would eat, but all I suggest now to my boys is to eat regularly, eat the things that have strength building value and develop the muscles. In other words, eat sensibly.

I think we eat too much on trips sometimes. I think the food should be chewed well. I have always said to do away with pastries, which you cannot digest. I do not know what effect carbonated water has, but I have always been against it. I have had boys who have been brought up on vegetables, and others brought up on meat and have had boys who cannot eat eggs, and I have had boys that want eggs before their races. So, what I tell my boys as a rule is to eat food that builds up their health, that is the best for them, and most of all, keep the bowels active in regular fashion.

Before a race or a meet, I would like to have them eat lightly and eat far enough in advance for the food to be digested. I have had men who do not want to eat at all before competition. They want to eat a heavy breakfast and nothing at noon. Others want more.



Clyde Littlefield, University of Texas

Are there any things you would like to talk about in reference to diet?

MR. MERRIAM: Do you not think that the average boy has a tendency to eat too much?

MR. LITTLEFIELD: I think so. I remember one time, I took a football team to Harvard to have a football game and I never saw so much eating as I saw in the diner. They were very sluggish in that game. I have had track men the same way.

I would like to hear from Dean Cromwell about the diet he uses on his trips. I once heard him tell how he feeds the boys on trips. I think that would be interesting.

MR. CROMWELL (University of Southern California): I go very gently on the noon-day meal. If the boys will eat good large helpings of fruit or vegetable salad, they arrive at the destination without gaining or losing any weight. As you have said, boys eat food to which they are accustomed. If you have a boy who is poisoned by eating eggs, we do not insist upon him having it. If the boy tells me he has eaten bacon and eggs for 15 years without a miss, 365 mornings per year, we must not tell him to quit; but, we are careful about the noon-day meal, because if you will allow the boy to eat a very hearty lunch, you will find he gains considerable. That is what you must be careful of.

Another thing is not to work hard. If you do not get on the train with condition, you are not going to get off of it with any condition. If you get on with it and try to retain it, you will probably be in good condition, and the boys would be able to compete the same afternoon if necessary. The best example I think I can give you is an occasion some three years ago in Boston. We left 24 hours late because of final examinations and we were delayed 24 hours by floods in the middle west. Because of this, we were only able to limber up a little that afternoon as we arrived in Boston on Thursday, and the boys were just as keen that afternoon as on Friday and Saturday.

Evidently you do not need to be there one week before or two weeks before, if they are careful about the work, eating and sleeping. Some boys studying hard, might be behind in the schedule on

sleep. Some are better off with nine, ten or eleven hours sleep at night. We usually have three or four berths made up in our car, so if they want to rest in the middle of the day they can do that. We want to give the boys rest enough, but not too much so as to make them logy, because this will take the dynamite out of their muscles. I have not given you much information at all, but that is the way we do it. We try to retain what we have when we get on the train. The secret is the noon-day meal—either great, big heaping dishes of vegetables and salad, or fruit salad.

You go to some of the luncheons at the service clubs and they give you everything from soup to dessert inclusive, and they call that a luncheon. We would not be very good athletes along about two or three o'clock if we trained on that.

MR. SCHULTE (University of Nebraska): What do you think about getting them to a meet just the night before it opens? I have done that two or three times and each time it seemed during the first workout that they felt like race horses. They were running wild.

MR. LITTLEFIELD: I remember one time I took the boys to the National Meet. We arrived there a week ahead of time, and they did not do very well in the meet. Later on, I took some men to the meet and we were there just in time for the meet, and they were much better. I once traveled in a car going 100 miles in the morning of a meet. They do better in a case like that than if I take them over there and let them sleep a night before, or two days ahead of the meet. That is my experience.

I found out that if the boy stands in a laboratory all afternoon the day before the meet, or is on his feet two or three days in the laboratory, he does not do as well as if he stays off his feet and gets his sleep the day before the meet. I had a boy that rode a bicycle all afternoon peddling papers. He was a two-miler. It was too much for him and he has done much better without the bicycle before the meets.

MR. SCHULTE: You might include the military drill with that laboratory. (Laughter)

MR. LITTLEFIELD: I had a high jumper once whom I did not plan to take

to the National Meet. He lost his form and could not make 5 feet 10 inches. It was between the high jumper and a pole vaulter to make the trip. Finally I took a gamble and I said to the high Jumper, "You are not going to do anything for two weeks except exercise." He did not jump. I did not know whether he could jump or not. He went into the National Meet and he jumped $3\frac{1}{2}$ inches higher than he ever did before in his life. He jumped 6 feet $7\frac{1}{4}$ inches. He had rested and had spring in his legs.

I think we overtrain the boys sometimes when we get them into condition; and my experience is always the long, slow process of training. I never keep time trials except when one man says he can beat another. There is one thing about track that makes it a pleasure to coaches. The men pick themselves. In football you have to pick them, and many times you pick the wrong one; but I never give a man a trial during the week. I keep a watch on him during his relaxed running, but I believe we overtrain men more than undertrain them. Has anyone any suggestions on that subject?

MR. PHILLIPS: I think that is debatable. I know Mr. Hayes sitting over here believes pretty much in a lot of overdistance and I think a lot of us do. I know I have seen his distance men do some remarkable running over a period of years, and I think a lot of us undertrain rather than overtrain.

MR. LITTLEFIELD: That is the thing I would like to find out. I think we do sometimes undertrain them, but there is a medium for the different men. I think distance men need a lot of training.

MR. PHILLIPS: I had a boy that I had trouble with, a year or two ago. At the latter part of his Junior year, he began to go bad. Naturally I thought he was wearing out, so I kept easing up on his workouts. He kept getting worse and worse. He never did get any better. The following year, taking the same boy and working him on a much harder schedule instead of easing up, he improved the whole season, even up to the finish. We lay our men off too much instead of keeping them going. I was just experimenting.

MR. NICHOLSON: I had more pulled

legs than you ever saw, but I learned a few things. I learned that all events are different. You take the sprint events. They are nervous energy events. When in doubt in that case, work the fellows much easier. Many times a ten day rest will do a high jumper a lot of good. If you laid a distance man off you would ruin him.

MR. LITTLEFIELD: That is what we are trying to learn. I did not mean a while ago when I was talking about overtraining, that it pertained to every event. I meant as a whole. I would rather undertrain my men than overtrain them, but as you say, I think you will find some men should work more in some events than we work them in other events. We have to learn the man, his individual peculiarities, his individual possibilities.

MR. MERRIAM: In regard to field men, I have had boys who if rested too long, had a peculiar mental attitude. They thought they would lose their form. I really think they needed the rest. Then they would go bad just thinking about it.

MR. LITTLEFIELD: I would like to ask Dean Cromwell how much work he gives his pole vaulters during the week.

DEAN CROMWELL: Quite a bit of work indoors. They do as a rule, work hard once a week before the competition on Saturday. They sometimes work twice, but always once. They work more for form than to try to break a record. Needless to say none of the vaulters at our University ever vault as high in practice as in competition. We do not try to do it. We try for form.

You know that running is of utmost importance. They must get enough sprinting to maintain the stride, because the check marks are very definite and they have to hit those to make the proper take-off. The amount of vaulting we actually do, as a definite rule, is once a week. If the boys are a little off form, give them twice a week for form only, then their competition on Saturday. We work quite a bit in the gymnasium. The boys work on parallel bars and horizontal bars.

MR. LITTLEFIELD: That is a mighty good suggestion that I have been wanting to get. Maybe somebody else has methods they use. We would like to

know other coaches' views.

These principles of training, I think, are very important. The activities of the competitors on the day before the meet. I think it is very important how we take care of those men, especially the day of the meet. Generally we eat a heavier breakfast, then let them take a walk if the meet starts at two o'clock. Let them eat a light lunch about eleven o'clock. Give them three hours if possible to digest the food. If some of the men have events later in the evening, they eat a little later. Have them try to keep off their feet as much as possible. What do you do, Ralph, with your men?

MR. YOUNG: Our distance runners eat five or six hours before they run. They eat a regular meal at that time. That means eating about nine o'clock in the morning—that one meal. I went into that thing skeptically at the start, but it is working out fine for us. The shot putters and the short event men will do just as Clyde does—eat a light meal three hours before they compete.

MR. LITTLEFIELD: Henry, what do you do with your men?

MR. SCHULTE: Let them eat when they like and each does as he darn pleases. Some of them do one thing and some another.

MR. LITTLEFIELD: What do you do, Hayes, with your men on the day of the meet?

MR. HAYES (Indiana): I have the boys worry as little as possible about their eating. If I have a boy that requires careful attention, I prefer him eating just an ordinary breakfast, and a little bit about three hours before the competition. I have had a good many boys who would rather eat breakfast a little later and have their meal about five or six hours before the competition. I have no set rule at all. It is entirely an individual matter and the main thing is to give the boys every encouragement on just being able to use common sense on the eating and the quantity. That is the main thing, and do not let him worry about it.

MR. LITTLEFIELD: That is a very good suggestion. I remember several years ago, I was paying a little too much attention to what the boys were eating and I sent the boys off by themselves to a meet which I could not attend. They were lost. They did not know

what to do. I think we ought to teach them to take care of themselves.

MR. HAYES: That is right. Each boy must have a sense of responsibility concerning himself.

MR. HAYNES (Denver U.). Here is one thing we tried this year. We told the boys at the first of the season, a general sensible eating schedule and told them to carry that right through to the day of the meet. They carry that right through, keeping their eating on a sound basis through the entire track season. They do not vary it for a single meet. Eat a light sensible lunch, not heavy, before practice or meet. They carry their own diet all the way through the season. The responsibility is on them. On the day of the meet they order their own food when they want it. They get accustomed to a routine. A man eats practically the same on the day of the meet as he does during practice. I find it works fine.

MR. O'SHIELDS (Tuskegee): I have a boy whom I cannot get to eat breakfast. He has been sleeping through breakfast for the last ten years. When I try to make him get up in the morning to eat breakfast, I have trouble. After he runs three or four races, he seems to weaken. When I ask him how he feels he says he is just as strong as when he started. He will not eat. I am afraid if I make him get up, I will create a problem of digesting. I have let him go as he wants to. I give him money and tell him to go out and get what he wants, but he seems to still be a problem to me as far as eating is concerned. When a fellow has to run five or six races a day, it is hard on him. Before the race I try to make him eat, but he misses the meal, and then goes out and runs five good races that way. I do not know what to do, but still he sleeps through breakfast.

MR. LITTLEFIELD: In the case of a boy like that, I would try to educate him this way: I would give him the examples of some of the champions in track—their diets. Try to prove to him that they were doing it right and in that way maybe bring him across. That is the suggestion I have.

MR. SCHULTE: I would let him alone. He knows more than the coach does, about himself.

MR. LITTLEFIELD: I found out by

experience that a boy knows more than the coach does about himself. Let him learn to do the things that are best for himself, and if he is smart and intelligent he will progress. The muscle power of the man in his development comes through interest. If a man is not interested enough to do the things that develop him, he is lost as far as I am concerned. I have had men not interested who had wonderful ability, but never did come through. A man has to be interested in what he is trying to do. I think in that way, he will develop.

MR. YOUNG: Greer of Michigan State is a nervous type of fellow. When he runs his best races, he vomits before the first race is run, and the food he eats on that day, never digests whether he eats six or eight hours ahead of the race. We let him alone and let him do what he wants, but he always throws-up before the race.

MR. LITTLEFIELD: I saw him do that once. He was nervous before the 100 was starting at the Kansas Relays. I thought there was something the matter with him. I thought he was sick.

MR. YOUNG: He is simply nervous, and tensed right up. His digestive organs are not working for that day. None of the normal fluids pour out to digest the food. He might as well not eat. Even if he eats something easy to digest it will never stay down. It will come right up.

MR. LITTLEFIELD: My experience with letting men work alone has not been very successful. I do not know how it is with you coaches. Say you were going to be away from your men for a couple of weeks. You give them a schedule. Have you had success with that man's keeping in condition and improving in those two weeks? Have you had success or experience of that kind?

MR. HILL: I would be scared to death to leave them for two weeks for fear they would do better.

MR. GEORGE T. BRESNAHAN (Iowa): When you first mentioned that I thought you meant a case like this: Where a boy went to his home for a week prior to a meet like this. Possibly school was out and he said that he had full facilities at home and he had duties at home to take care of. But, he said he would stay in shape and do the same things that he had been doing all year.

Definitely the experience that I had was very unfavorable, if that is the point you make.

MR. LITTLEFIELD: That is the thing I am trying to bring out.

MR. BRESNAHAN: The stimulation of having someone beside him is missing. It is like a boy taking a correspondence course. He has to be a type like Horatio Alger, to force himself sufficiently. I do not mean he has to run himself out, but it occurs to me that the stimulus is gone. That does not mean you have to have a mastermind cracking the whip over him all the time.

MR. LITTLEFIELD: What do you think, Larry, about a man training himself?

MR. SNYDER: I do not think the boy comes along as he should. Our two-miler, Whittaker, is a boy who likes to train himself on the cross-country course. We cannot get him on the track to work in trials, or pace, unless I go out and hail him as he goes around on the cross-country course. He dresses at his home, and goes right out there, and unless he is hailed in, he will not come inside the stadium. He is not at the National Meet today, and he should be running with the top-notchers. That is because he has not learned to push himself on the course enough. He just goes out and runs. If he ran with the other boys and forced himself on the track a little bit, he would be better.

MR. LITTLEFIELD: That is exactly the experience I have had. Not all, but the majority of boys will not push themselves enough to develop like they would if someone was pushing them around.

MR. KARL SCHLADEMAN: (Washington State): I have found the same thing true.

MR. LITTLEFIELD: I think we are all interested in "warming up." I know we have plenty of coaches here, men who have had experience with the procedure of warming up. I had a little experience or two myself. I had one this year. I had a vaulter and he was coming along nicely, but I do not think he knew how to warm up right. Down at the Kansas Relays, we were resting and training, he had been over with the sprinters, working out with the sprinters and warming up some before he started. He also liked to work with the javelin. He went to the middle of the field and worked with

that. There was a Kansas boy vaulting a little over twelve feet, so our boy found a pole, ran over to the pit and vaulted. Then he told me that he had a knot in his leg. I told him to stay put. The experience that I had in that case was this: Whatever event a man is doing, he must warm up with the exercises that will be used in the event he is going to take part in.

What do you think about that, Cromwell?

MR. CROMWELL: You covered the whole ground yourself. Certainly you want to warm up the muscles you are going to use in that particular event. He had not done any leg stretching exercises for the vault and it was easy to either tear or pull a muscle on the take-off.

MR. LITTLEFIELD: You see, he had been taking exercises of all types but not the exercises used in vaulting.

MR. NICHOLSON: Here is the theory that I have. If you take a distance man and run a tough two miles on Saturday, you could go out on Monday and run him a fairly tough three miles. Now, why? Because in that two miles he was not working particularly hard on muscles like a sprinter or high jumper, or broad jumper. Those fellows (sprinters and jumpers) on Saturday put out an awful lot of nervous and physical energy. It takes fully two days to recover from that.

MR. LITTLEFIELD: That is what I found.

MR. NICHOLSON: It is just a theory, but I feel that those sprinters and jumpers need two days rest for that muscle "tone" to come back.

MR. LITTLEFIELD: I am glad to learn that.

In warming up, how long should you warm up before a race and how much. That is something I have never been able to successfully determine. We have a man here that has had some experience in graduate work at the University of Iowa. He has had a little experience in testing out some of the high school boys in track. Henry Booher. He has been working on the warm up and he has a questionnaire. He probably wants the coaches to fill it out. I would like for him to discuss a little of the work he is doing.

MR. HENRY BOOHER (Breckenridge, Minnesota): I realize that if one is to get up and make an absolute statement, this is a bad place to do it, because you will get it shoved back at you. But, I will be glad to state briefly what I have done thus far, in determining a warmup pattern that is adaptable to work with high school boys. In the first part of my study, I attempted to find out the trial or trials on which the boy under competition is getting the best results and in that study, I attended possibly 21 meets, three of which I had to throw out so I have results of 18 meets on over 400 trials of boys. The results showed that on the second trial in the preliminaries, the best jump or best throw in the broad jump, discus or shot, was obtained. The second best was on the first and third in most cases, in the preliminaries. Thereafter, there was a scattering and very few got the best results on the first in the finals. However, in the second and third in the finals, there was a distribution.

So, keeping that information in mind, trying to group the boys, then I went to handle the "B" part of the study. I took 26 boys I attempted to train in these events. I took the 14 best ones. I gave them a series of warmup trials, such as Mr. Littlefield told you about. After giving those, I was able to hit a pattern whereby most of the boys succeeded.

Where we gave this warmup and then took the trials immediately following most of them, they did get their best performance on the second trial; second best on the first and third best on the third. That is briefly what I have been trying to do. I have the percentages here and also the figures. In reference to the questionnaire, I have, I would like to get your permission if it would not bother your boys, to have them fill it out. If I can get their warmups, I will see how it coincides with the warmups I have been giving. I started this study after observing a few cases wherein, for instance, a broad jumper had one trial left. They called for the relay and this boy was running a lap in this relay. He took his lap in the relay, came back and made his best performance. It seemed to show that he had not warmed up enough.

In another case, a pole vaulter was eliminated around 12 feet 6 inches. He went over and participated in another event, came back with the bar at 12 feet

9 inches, and made it. Was that a warm-up? It was probably the nervousness and strain which was greater than the warm-up.

I am attempting a study to determine that. I would like to get a reaction of some of you people and see if I am on the right track. If I have a problem here, we can distribute it; if not, we will try something else.

Thank you very much for your time and I will be glad to answer any questions that you have on this. (Applause)

MR. LITTLEFIELD: That is mighty fine. He is working toward something worth while. It is something to think about.

I had the experience one time of a boy taking exercises—high kicking. He was a boy that was muscle-bound, and as he high-kicked he jerked that muscle away from the hip. After that he was no good. I think that different types of boys should warm-up in different ways. I do not know whether I am right or not.

MR. SCHULTE: I think each boy ought to warm up with bending and stretching exercises after a little running; and he ought to keep that up every day. He should do that in every meet—before he competes. I am thoroughly convinced that 99 out of 100 boys do not warm up enough. I watch the high school boys in my state and see them get up without a warmup and try to run. They never do warm up. The average college man does not warm up enough.

MR. LITTLEFIELD: I have had several quarter milers run better in the relay than in the regular quarter. I would like to ask Coach Hayes a question that I am interested in personally. What effect does the warmup have on the circulation of the blood in the body, to get him used to the thing he is going to have when he gets in competition? What does it do to the body to get it ready other than stretching out the muscles?

MR. HAYES: He goes through the regular routine with his particular event in mind. He is preparing the muscular system and particularly his heart. We want to pump that heart up to the rate he is going to use during the event. That is important, because the blood supply after all is the thing that carries him through the race or in anything, and

each boy should become a student of himself. He should be checking on himself. He knows when his muscles are all right. He has, of course, this thing of reaction in mind. But, on the other hand, he goes through some little pace or some speed approaching the thing he is going to use in the race. That is a check on himself and the main thing that the warmup does, is, it must give the entire system a chance to adjust itself to what is going to happen to it later. Some boys require a long warmup. It depends on the condition of the boy.

When you gentlemen talked about conditioning, you should have mentioned more the development of the boys. Some are just building up—just going through a process of development. They have not reached their maximum physical ability. It is pretty hard to put a boy in maximum condition. I hardly ever like to feel that I have put a boy in maximum condition, because you cannot stay maximum very long. I like to think of it as a process of developing all the time. As you go through this process, you take your rest periods and so on. You try to have the boy ready for the event mentally, without worrying too much about it.

If he is tense, the warmup process puts his nervous system in shape for competition, as well as his circulatory system. He can relax better. It takes the nervous edge off a little bit. He is not so apt to tense if he knows himself pretty well. He is checking on his tenseness. In any event you want to get rid of the tenseness. All the top-notchers do that, but it varies so much with individuals. I would not want to give my program on warming up because it varies from year to year with each individual I have. But, this mental side is extremely important in preparing the boy for his competition.

MR. LITTLEFIELD: Coach Hoyt of Michigan, I want to ask you a question. If you pardon me, I am having a lot of fun out of this. I think this is what I always wanted—a chance to ask questions, because, this is what has helped me to get the ideas of all the men. How long before the 100 or 220 do you warm up these men?

MR. HOYT (Michigan): I like to have the boys go out 30 to 40 minutes before the event and start to warm up. I think

Mr. Hayes talk was about the best talk I ever heard about warming up—the one he just gave. I think all events depend upon the individual. I like to have the fellows after they warm up a while. I like to have them come back and lie down for awhile, so they work up a good sweat and relax a little.

MR. MIKE RYAN (U. of Idaho): Is not warming up, largely a matter for the individual? As Mr. Hayes mentioned just now, the heart and the circulation are very important items in the process of preparing a man to run a race. Are we not sometimes inclined to think that the heart is more associated with the circulation than with the respiration? Physiologists a number of years ago used to figure the heart only a circulatory organ. Now it is considered the largest respiratory organ of the body. This preparing of men has to do with the absorbing of oxygen and the metabolism available in the body. If a fellow can absorb a great deal of oxygen in his blood, he is in better shape than the fellow without the ability to absorb that much.

Oxygen is a very important factor of competition as well as of life. We cannot store it in the body. We only have the amount that the blood will carry for the time being. We get that from the air. Some fellows have the ability to absorb a great deal and they have a greater volume of blood to carry than other fellows, so I think the whole thing is a matter of individual aptitude rather than something that can be applied to a group.

MR. LITTLEFIELD: There we have some new information.

MR. NICHOLSON: I have the same idea that Henry Schulte has regarding warming up. They do not warm up enough. I will not allow them to be rubbed before a meet. I tell them to go out and warm up and rub themselves after warming up. I have watched the big championship meets, really good men whom I thought competed pretty well, but whom I thought did not warm up enough. If you take away the "crutch" that they have of rubbing before the race, the chances are they will warm up enough.

MR. LITTLEFIELD: There are two men here from higher altitude. I would like to ask them what effect the coming from a higher altitude to a lower altitude has upon the men.

MR. HARRY ADAMS (University of Montana): I think it has very little effect. I think it affects a man more, to go from a lower to a higher altitude. The experience that we have had from our own men going to a lower altitude is that it affects them very little.

We had the Conference Meet at Missoula one time. The performance up there was as good as the men who had made them on their own home grounds, which in most cases was at a lower altitude. Possibly Dean Cromwell was there. Did any of your men complain about the altitude at Missoula, Montana, in 1928?

DEAN CROMWELL: The distance runners could not run at all. We could have left them at the hotel.

We sent a team from Los Angeles to the City of Mexico about last summer. They sent some very good boys down there. They were wise enough to send only those running less than the 440. The elevation is several thousand feet, and they knew the boys could not run there so they did not attempt it. That was out. It is all right from a high altitude to a low, but heaven help you if you go from a low to a high.

MR. RYAN: I brought a football team from Moscow, Idaho last year to Reno. I did not know the altitude was 5,700 feet. We got up there on a Friday, and we gave them a long easy workout because it was two days on the train. A broadcaster from the radio came out on the field and asked me how the altitude was going to affect the boys. I said "What altitude!" Then he told us how high up we were. The next day after the game started about three fellows started to hit the ground. They logged right down there and their breathing was very rapid and shallow. They had a tough time getting through the game. Incidentally they licked us. We should have been a much stronger team. That was our experience. Whenever I bring a team anywhere, I look up the altitude before I leave town.

MR. J. E. IRISH (Colorado College): Coming from the Colorado altitude of five to six thousand feet, where we do and being interested in the promotion of sports there. I am always hoping that some one will prove that there is no bad effect of coming to the high altitude. There have been a few experiments made, some by a Doctor connected with

the University there, but he has been working with extremely high altitudes in South America—up in the neighborhood of 13,000 feet. Of course, Denver is 5,200, Colorado Springs is 6,000. In 1929, we had the National A. A. U. track meet in Denver. We talked to several of the boys of the effect the altitude had on them. Some would say they felt exhilarated. They could do better. As a rule, however, the distance runners were probably adversely affected to some extent. There is a very good illustration to offer to uphold that contention. Doherty (Detroit U.) won the Decathlon, and that event was held that year in one day—ten events. The year before it was divided into two days; but he exceeded his record of the previous year. Any of you know how grueling that is, know that while that does not prove anything, it is a factor in favor of the non-bad effect of the altitude.

On the other hand, there were some distance men who claimed they could not do as well. I talked to various boys coming from lower altitudes and I am convinced of this: That 90 per cent of the bad effect is in the head. They come to a high altitude and they expect to be affected. If a man is in good shape and you could move him from here to Denver, nine chances out of ten he will perform just as well as he did here, if he did not know the altitude was greater. We have the National A. A. U. Basketball Tournament in Denver, and have had it there for the last three or four years. Very few of those men complain about the altitude, except those teams who knew they did not train.

There is another factor. If a man is in near perfect condition, if he goes to a higher altitude, he will be less apt to notice any different results. Whether 5,000 feet is enough to make any difference I do not know; I hope it does not. I am convinced that it does not if they do not know it or do not worry about it.

MR. HAYNES: I have charge of the housing and feeding of all the boys there (Denver U.) and we find the teams that kick about the altitude are the boys that get drunk and raise hell, and are not in shape.

The Missouri Valley A. A. U. brings the boys from down in that lower altitude up all the time. They were afraid the first time. They expected to bleed

through the eyes, nose, and mouth. Now, when they come up there it is just another battle.

Once in awhile they say it takes them a little longer to recuperate.

MR. BRESNAHAN: What is the relative humidity? Is it dryer?

MR. HAYNES: It is very dry.

MR. BRESNAHAN: When we speak of rarified air, is there less oxygen in it?

MR. HAYNES: The pressure is less up there, but I do not think it has much effect until it gets up nine or ten thousand feet.

MR. JOHNSON: It is my opinion that a team that changes from a high altitude to a lower altitude for competition is not affected quite as much as a team that changes from a low to a high for competition.

MR. SCHULTE: After a game in high altitude, I have heard the boys say that they wish they could go on like that all the time. It peps them up.

MR. LITTLEFIELD: I have enjoyed this very much and I hope all of you got as much out of it as I did and I hope we can have this kind of a discussion every year. Thank you. (Applause)

PRESIDENT JOHNSON: Thank you very much Clyde. I doubt if there is a track coach here that does not feel that he has benefited from some of the things brought up in the discussion today.

This afternoon we are going to have what I think will be a very interesting program. As I have figured it out now, we will first have a discussion and questions of course, on the javelin throw, by Chick Werner and George Rider, following which I would like to show or have shown some pictures which have been made specifically for track coaches. No doubt a number of you have seen them. I hope not too many. Most of these pictures were taken at the National A. A. U. meet last year at Milwaukee, and edited by Brutus Hamilton, Dean Cromwell, Lawson Robertson and Harold Anson Bruce. Most of those pictures are well worth seeing. They deal with all the events in track and they have all the field events and most of them are at normal speed. A good part of them are in

slow-motion.

Following that for about an hour, we will have discussions on the high hurdles which will be led by Bob Simpson, a former world's record holder, and after that the usual business meeting. We will also have our election of officers for the coming year this afternoon, and reports of the various officers regarding our membership and our financial condition.

We usually have the nominations made by a committee which considers carefully, I hope, the nomination of the candidates. This does not mean that other nominations cannot be made from the floor. But I believe that a well qualified committee can well pick out the men that are to work on the affairs of the Association during the coming year.

For this nominations committee I would like to appoint a group that have been picked from widely separated locations. I would like to have George Rider act as Chairman. The full committee will be as follows:

George Rider, Miami
Carl Olson, Pittsburgh
Wilbur Hutsell, Auburn
Ralph Young, Michigan State
K. Schlademan, Washington State

AFTERNOON SESSION

June 16, 1938

The meeting reconvened at one-thirty o'clock, Mr. F. P. Johnson presiding.

PRESIDENT JOHNSON: Gentlemen, I want to welcome these men from the University of Minnesota Coaching School which is now being held. I want to tell you that whatever we members of the National Collegiate Track Coaches Association presume to know, is also yours, and any information that we can give you that might enable you to build up track in your part of the state or your part of the country, we shall be very glad to disseminate through you.

I might also say that we invite all of you men to membership in our Association. Active memberships are only for

I am going to charge this committee with the selection of a President at least that does not have much more to do than coach track and can put some time on thinking about what this Association can do for its members next year. I do not believe we do nearly as much as we can. There are a lot of things that have occurred to me that might be done, but, as I say, it has been a tough job to get those done. I am not going to attempt in any way to designate who might be put in as the leader of a crowd like this, because I think it is fine that no politics have entered into the affairs of this Association as far as I know. I hope you gentlemen will consider carefully the names of men who will be put in charge of the affairs of the Association.

We will start this afternoon at one-thirty, and I am confident we can be finished pretty close to five o'clock.

.... Other Announcements

PRESIDENT JOHNSON: If that is all we can do this morning, we are adjourned.

.... The meeting adjourned at eleven-forty o'clock

college and university coaches, but associate memberships are open to high school coaches and others interested in the sport and we should be pleased to have any of you apply to Mr. Higgins here, the Treasurer pro tem, and pay your annual \$1.00 membership fee. If it is your choice we should like to have you all as associate members.

The first event we are going to discuss this afternoon is the "Javelin Throw." I should like to call upon Chick Werner of Pennsylvania State, who will have one of the best javelin throwers in the country here for the meet this week. Chick is a thorough student of all kinds of track affairs, and we are very glad to have him here for the discussion of this event. (Applause).

THROWING THE JAVELIN

MR. CHARLES D. WERNER (Penn State): I appreciate this opportunity and hope that something beneficial will come out of our discussion. We all know that the javelin throw is one of our poorer events, and perhaps the one on which this country should perk up. The Olympic games rarely finds an American among the point winners in the javelin throw and to date we've never had a champion. This event has been dominated by the Finns and Swedes, and recently we find the Germans coming to the front. Naturally, we would all like to change this situation and to such an end let us pool our knowledge.

Past discussions of the javelin throw at these meetings have brought to us many enlightening ideas. The contributions made by Henry Schulte after his return from Germany, by Brutus Hamilton and Kenneth Churchill as well as Holmes "Movies on Paper" have served to give us a basis for thought. Recently I have felt that the event was one in which some fellows threw it far and others not so far. Sure, there were a few fundamental principles, but a great deal of it was plain mystery.

Why are the Finns and Swedes superior to us in this event? One answer with a bit of logic is that the kids over there throw javelins, whereas the kids over here throw baseballs. This gives both groups a natural base or foundation for throwing, but the great difference lies in the manner or form of this throwing. The Finns do practically all of their throwing with an overhand motion, and they get a great deal of body action into it. Our own kids throw baseballs, stones, et cetera with a decided side-arm motion, and they get very little if any body action in it. I believe that these features are evident among the javelin throwers of Finland and America. Most of our good natural throwers become baseball

players, whereas in Finland they become javelin throwers.

We have made studies of the various forms and as a result we are quite divided in our opinions. We are teaching many varieties of form as you will see tomorrow, when the cream of our collegiate throwers go into action. In the main event, there are about three basic styles or forms:—The Finnish (or front cross over) and the two more common American forms—the cross step and the hop step.



Charles D. Werner, Penn. State

A few years ago, I asked Phil Northrup (a Michigan javelin thrower of 200 foot ability) what he considered the most outstanding essential to good throwing. He replied, "I think elevation in flight is most important. A fellow should try to throw so that the javelin will reach its maximum height at about the 185 or 190 foot mark." True brother true—but how?

A study of baseball pitchers and outfielders when they make a throw, will show that when they are trying to put more stuff into a baseball throw, they do something to get the body into it more. The baseball coaches will substantiate this—they teach it.

I believe that that is the dominant feature of the Finnish style of javelin throwing. The American forms have not been getting as much body into it, and not utilizing the speed of the run as much as the foreigners.

It seems that this year, especially at this meet, we have quite a field of javelin throwers well over 200 feet. I hope we may keep this up and improve up to the point where we can be worthy competitors for the Finns and Swedes in the next Olympics.

I will just briefly mention some of the points that I think are rather new to me, and then we will have an open discus-

sion. My boy uses the hop form, so I will talk more about that, and then I will ask some of the coaches whose boys use other styles to speak of them.

Ordinarily, in the hop form as I knew it about ten years ago and as I was taught to coach it, the boy hopped into a position with his feet in a line with the throw, and with his body turned sideways so that it was in line with the throw. If you will analyze the Finnish style—the greatest throwers—you will find that their feet are not quite in line with the throw; nor is their body exactly parallel to the throw. It is a little bit "open," (tends to face direction of the throw). I have tried to teach this boy of mine to get that into his throw. The way we have got to it best was to have him land after his hop with the right foot pointing a bit forward instead of out which has been the common method. Instead of having the left foot in a line, have it a little more open (to the left). The body would not be completely sideways, but a little bit open so he can get more body into it.

We have tried a practice procedure to help get the body into the throw which is of this nature: With the shoulder carry javelin pointing upward, just as the boy makes the hop, to delay bringing the arm back until he is well into the hop, whereas the common procedure has been to get the arm back and then hop into it. I discovered this from watching a pitcher throw a baseball. I found that when the hand reaches the maximum backward position, it starts forward immediately without a pause. The same is true of anyone throwing from the outfield, or even of someone throwing a stone. As soon as the arm reaches the backward position, it starts forward.

In the javelin throw, for the greater part, we had the arm in a backward position and we missed that action. I do not believe it is possible to have a boy take a fast run and delay the bringing of the arm back because with that speed it will upset the footwork and body balance. He will not have the proper stance. But, if he will use it with a slow run and practice, you will find he gets the body into it.

I had the sad experience last year of having a couple of throwers up over the 189 foot mark and one around 200 for one meet and after that they were pret-

ty bad throwers because they had sore backs. It was a sad experience in one way and in another it was very valuable. It proved to me that we were at least on the right track. Heretofore, the injuries had been with the elbow, not with the back.

The matter of throwing correctly so as to prevent a sore elbow or javelin arm, I believe we were probably told about several years ago, by Ken Churchill (California '31) when he emphasized the fact that if the elbow led the throw there was little danger of having a sore arm; but, if the arm led the throw instead of the elbow, there was quite a bit of danger because of a twist.

I have gone into this at our anatomy laboratory and have looked at the cadaver's elbows and found that there are some nerves which cross into two grooves in the bones of the elbow, and those two main nerves are covered by the tendons from the upper muscles and lower muscles; and when you get the arm in an improper position, as it is when the throw is led with the hand instead of the elbow, the straining of those tendons, the pressure caused by the strain on the nerves, causes an injury.

Of course there are muscular injuries too, but I believe most of our javelin arm injuries are of this nerve type. Nobody seems to know exactly what that is. Dizzy Dean probably has the same injury.

The javelin, I believe, should be thrown over the ear rather than out to the side. There have been some excellent side arm throwers, but they have not lasted long. I am crossing my fingers as to my own javelin throwers. We will have to watch them in the next two or three years.

Here are some statistics from the Big Ten. Of all men throwing over 200 feet as sophomores, very few were still throwing as seniors. Is that right, Bill?

MR. HAYES (Indiana): I would hesitate to say. I know two—Panther of Iowa, and Reinhard of Indiana.

MR. BRESNAHAN (Iowa): Every winner in the sophomore year had something happen to him in the senior year. The only exception is Lamb (Iowa, '38). He threw about 201 in his senior year.

MR. WERNER: I hope we are on the

right track, and the preventive for this elbow injury is leading the throw with the elbow rather than the hand. Have any of you had a similar experience in teaching your javelin throwers that method of leading with the elbow?

MR. HAYES: This fellow Reinhart was a little fellow—145 pounds. He had come up as you mentioned, being a would-be pitcher—he had a good arm. He got around 200 feet with the arm. He finally got his body into it and that added the distance. His best effort was 215 feet. That was because he got his body into it. That meant of course that his elbow was leading. He had too much snap before. He hurt his arm, but he came back and did just as much afterwards as before; and as further proof, the next time he was hurt in the back, and of course that meant that he was using so much more back than arm. I have had the same experience with others. He just happens to be the best case because he was so small and demonstrated what a body could do. A lot of these fellows with 200 feet are just arm throwers.

When I was in Finland, I saw the kids throwing the javelins around like we throw baseballs around here. But, they get their back into it. You never see a hurt man, or a hurt elbow.

MR. WERNER: What was your experience, George?

MR. GEORGE RIDER (Miami): I think we have the most interesting experience to bear out the importance of back throwing instead of arm throwing. This boy we have started out as a sophomore—never had a javelin in his hand before—he was not the athletic type. He was a good sized boy, rather eager to do something. Within the first month he hurt his elbow. We had been telling him to come through with the elbow and pull rather than snap it, but he could not do it in the beginning. He popped his elbow as it snapped, and hurt it so he could not continue that way. I have said ever since

that I think one of the most important factors in his becoming a good thrower was the fact that he hurt his elbow and while it was hurt learned to come through and put his back into it. He has never had a sore arm since. I think that had very much to do with his coming through and getting his back into it.



George Rider, Miami

Again to bear out what the other men have said here, the only other injury he has had since that time was a stretching out of the muscles under the left side, which shows how far he comes through and I think that answers your question there.

MR. LITTLEFIELD: I tried to get my boy to lead with his elbow. I do not know whether I have succeeded or not. He throws it with a carry-back over his shoulder.

MR. WERNER: One of the features of the Finnish javelin throwers has been a timing of getting the javelin back so it would help to get more body into it. The thing that causes you to get your body into the throw is to alight in a throwing stance with your weight far to the rear and your right leg bent, so you are coming from a long pull position, and you throw your hips into the throw much like a golfer would use his hips, if used properly.

This exercise that I spoke of earlier, of delaying the bringing back of the javelin, will get a boy into that position. Do not bring your arm back until you have started your hop. However during the actual throwing, I have my boy bring the javelin back about half a step or a full step before he starts his hop, because I found that the action is too jerky otherwise. The Finns use some circular motions to get it back there. Some use a pumping action as they run, but all seem to accomplish the same thing.

Now, as to the release of the javelin. One of the most important things is to be certain that the boy throws through

the shaft—that his line of force is in the direction of flight. He must not throw under the shaft. I do not believe that many of us have had throwers who throw above the shaft, but most of us have had some who threw under the shaft. If they do this thing correctly as in the Finish position, the end of a throw will find the arm fairly well extended in the direction of the flight. If incorrectly thrown, the arm will come down and across the body. That is easier to say up here than to have a boy do, by a long shot; but if they continue to practice it, they can acquire it.

Sometimes they release the javelin too soon. Sometimes it is a flip. That is a hard thing to detect because a boy can fake it so well. He can release the javelin with a flip before the arm is well extended and then stick the arm out there as though it was thrown correctly. It is much like a golfer who has made a bum shot and before the ball alights, he will assume a position much like Bobby Jones. (Laughter)

I think these little exercises of spearing the javelin into the ground are fine to warm up with and to learn to rifle the javelin; but always give the boy the idea that he is flipping it when doing this, instead of following through. They seem to be much more accurate with a flip than a follow through.

MR. NICHOLSON (Notre Dame): What speed do you use on the run?

MR. WERNER: I believe it is more important to regulate that speed so that during the footwork and during the getting into the throwing stance, the boy will have his maximum speed. He will be progressing in speed. One of the big difficulties is that he will run so fast during the run that he has to slow down before he is able to get into throwing position. Then he is throwing the javelin with a decreasing speed and it detracts a great deal from the throw. I believe that a boy is much better off to start out very slow and increase, rather than have to slow down to throw.

My boy only has a run of about 42 feet before he starts the footwork—eight strides and he hops. As soon as his coordination is better we can increase the length of the run and also the speed. We have experimented now with increasing the speed and it upsets the timing. The overall from the beginning of the run

to the take off is about 60 feet.

MR. PHILLIPS (Purdue): Do you straighten the arm clear out behind?

MR. WERNER: That is absolutely essential. The arm must be fully extended at the rear. Throwing with the arm in a bent position is a bad throw.

MR. RIDER (Miami): What grip do you use?

MR. WERNER: The thumb and second finger. He does that because he came up there using it. Most of the good throwers seem to be doing that now. Ten years ago it was with the first finger and the thumb.

MR. NICHOLSON: Have you had slow moving pictures taken of them?

MR. WERNER: I have, but they failed to show anything startling. About all that I got was the fact that he started the throw before the left foot came down to the ground. It might be important. I noticed that the baseball pitchers do the same thing. They are in a throwing stance with the left foot elevated. He brings back his arm to the rear with the foot elevated and throws when the foot comes down. Outside of that we did not learn much.

MR. NICHOLSON: Does the javelin go over the head, over the shoulder, or over the ear?

MR. WERNER: I believe the best throwers will throw over the ear. Right now this boy throws too low over the ear. He got into that habit by trying to lead with the elbow. He throws the hand down which makes a low turn of it. If he can get the action so the elbow is leading and the hand comes higher, I believe he will throw farther.

MR. SNYDER (Ohio State): I think you ought to demonstrate that grip. That was something that I was much interested in.

MR. WERNER: One of the common faults in the grip of the javelin is that instead of holding the grip with the extremities of the thumb and first finger or second finger, they wrap the finger around the javelin. When they do this they lose an awful lot of the flip, which is the same flip that they get in the shot put. That grip adds a great deal to the throw.

My boy, Vukmanic, came to me about three weeks ago with quite a callous and blood blister down the middle of the second finger. It was getting very sore. I told him that he must be gripping the javelin incorrectly to get it. He had his fingers wrapped around it, instead of gripping with the ends of the fingers.

MR. HAHN (Virginia): How far does the second finger come? It does not go around it at all, does it? Just rests on each side of the cord.

MR. WERNER: Yes. And the rest of the cord falls in the hollow of the hand.

MR. MERRIAM (Chicago): What are the different types of foot work?

MR. WERNER: I would like to call on another gentleman for that—George Rider. He has a boy, Larry Bell, who has thrown farther than any other American—well over 230 feet. He uses a combination style which is a little different and we'd like to hear from him.

MR. RIDER (Miami University, Oxford Ohio): Perhaps I should explain one or two things in the development of Bell's style of throw that Chick has not mentioned, in order to give you a better understanding of how he throws it.

In the first place, I started him out on the so-called "Finn" method. He uses the "Finn" grip with the tip of the second finger and the tip of the thumb coming behind the binding, with index finger being partially around and pointing up the javelin. This is not like the Hungarian style which has the index finger stiff, and pointing straight up the shaft of the javelin. Bell carries the javelin well up in the fingers and not down in the palm of the hand. I think this is a good feature because holding the javelin well up in the fingers permits a greater wrist snap than you get if it is carried down in the palm of the hand. At any rate, here is about the way Bell carries it: The thumb and second finger are behind the binding with the index finger pointing slightly around and up the javelin.

I started him out carrying the javelin with the point down where he could look right down the shaft and be sure that it was in line. As he worked it out, largely by himself, he gradually brought the point up until he now carries it only slightly below horizontal. In his run he carries it about even with his ear, his

arm free and relaxed with a little forward and back motion as he runs.

One thing that Bell has perfected is his throw, perhaps a little better than most of our American throwers, is the spin he imparts to the javelin when it leaves his hand. It leaves his fingers with a spin, like a bullet coming out of a barrel. It has a spinning motion with practically no vibration on the good throws. This spinning motion helps to eliminate any vibration present in the shaft.

I should have said in the first place that about all the credit I can claim for Bell's success is that I spent a whole day picking out a javelin for him. I went all over the city and tried all the javelins in all the stores until I found one which I thought was a good one. It was a Finn javelin with the correct weight and balance. It has a rather large grip or binding which Bell prefers to the smaller more slender ones. When thrown well, it goes out at the proper angle and just tilts over and drops perfectly when landing.

Bell's first track experience came in the spring of his sophomore year. He was a fine built young man of about 175 pounds standing 6 feet in height. He was rather slow and awkward but willing to try anything. It was obvious from the first that if he were to make the track team it would probably be in one of the field events. After trying the shot and discus a little he finally came to the javelin which seemed to more or less fascinate him. With a degree of interest aroused, I attempted to teach him the Finn technique of throwing the javelin which, as you know, employs a rather speedy run with a front cross step etc. in preparation for the throw. We worked on this style all season and the average distance of his throws in competition was perhaps 165 feet. At the end of our season in the Conference meet he got one throw slightly over 180 feet to win the event. It was his only throw over 170 feet that season. The following fall, the beginning of his junior year, he asked me if I thought he would ever throw 180 feet again. Naturally, I gave him lots of encouragement and he practiced all that fall on form particularly. The next spring before the snow was off he was out with the javelin spearing it around to get his arm in shape. When our spring recess came, in early April, I had him

take a javelin home with him. When he came back to school he had a new idea, that is new to him, which he thought was going to help him. This idea was simply the addition of a short hop step to the front cross employed by the Finns. Without the hop he was unable to get his left foot down on the ground for his throw. His delivery was very much like that of a baseball pitcher with his left leg high in the air. We discovered that by adding the hop he could get the left foot down on the ground and assume a wide stance throwing position with both feet on the ground similar to that of the shot putter and discus thrower except that his feet were farther apart. I consider this wide stance with both feet on the ground a fundamental position.

I have some motion pictures and still pictures which give a pretty good idea of how he performs.

May I further say that the minute he began getting that left foot down and into a wide stance throwing position the distance of his throws increased immediately, and it is obvious that the addition of the short hop was largely responsible for this. For a few days we had some doubt as to the wisdom of adding the hop to the Finn method, but when his throws jumped steadily from 180 feet to 202 feet and then 216 feet on succeeding weeks, I concluded it must be O. K. and from that time on we have been trying to perfect the timing of this, shall we say, "Bell style" of throw. I might also add that from that time on he began to make his coach look good! There is no doubt in my mind, but that after the form is perfected, the timing of the throw is of greatest importance. It has only been during the past couple of weeks that Bell's timing has been near perfect. I believe that his record throw of 231 feet 7½ inches at Marquette in the Central Conference meet last week was one of the easiest throws he ever made and of course that was because his timing was near perfect and everything clicked.

Chick said he wants his man to bring the javelin back at the time he takes his hop. I tried this with Bell but it just wouldn't work for him. What Bell does is to level the javelin and start it back when he hits his first check mark with his left foot. On the count of one his right foot goes forward; on two, the left goes forward and toes in to the right

slightly; on the count of three his right foot crosses in front of left foot with the right foot pointing about 25 degrees to the right; and by this time the javelin is all the way back. Now on the count of four, he takes a short hop on the right foot landing with the left foot on the ground pointing straight ahead and the right foot pointing to the right about 25 degrees. In this position with his feet in a rather long stride position, he squares his shoulders to the front, elevates the javelin high over his right shoulder, his torso leaning slightly to the left. Almost simultaneously with this, the right hip comes forward with a snap, the left shoulder pulls back and all the back muscles come through to complete the throw. The javelin leaves his hand after his right foot leaves the ground but while most of his weight is carried on his left foot. It appears as though he gets a little added drive to the left leg as the javelin leaves his hand. After the javelin leaves his hand, he springs forward, or rather continues forward, landing on his right foot facing rather straight to the front. He drives very hard off his left foot in his follow through and therefore lands rather hard on the right foot up to the toeboard. I have a few snap shots showing positions in his throw which I will pass around at this time. His style, I should say, is a combination of the Finn and the American hop form. It is an outgrowth of an attempt to master the Finn method. It is perhaps more like the Swedish style than any other.

Bell carries the javelin like the Finns except for the point being slightly higher; his grip is exactly like the Finns'. His front cross step with the right foot is like the Finns' except his foot points more forward. His short hop is an addition to the Finn style but from here on it is quite like the Finnish style with the exception of perhaps more drive off the left leg in his reverse. It is really another step forward rather than a reverse because his right foot at the completion of the throw is a full step ahead of where the left was when the javelin left his hand.

Bell uses two check marks in his run. The first check mark, the one nearest the board, is about 42 feet. His second mark, or his starting mark, is eight easy running strides back of the first. When he reaches the first check mark in his run, he then counts 1, 2, 3, Hop, and

Throw.

In my coaching experience I have learned that it is not always, yes I will say rarely, good method to insist that a boy adopt the form used by the champion in his event. It is much more important to recognize the fundamentals and essentials and then adapt them to one's own natural abilities. It was this method that I employed in training and coaching Larry Bell, and it is only fair to say that he worked this style out pretty much by himself.

I have been wondering, since the javelin throw has been eliminated from so many high schools, whether we are going to have any good throwers in the future. When I think of Bell, a boy who never had a javelin in his hand until he was a sophomore, and see what he has accomplished, I am not going to give up hope. About the only athletic experience Bell had was a little basketball in high school and as a freshman in college. He is a fine looking 183 pound 6 foot man, but rather slow and inclined to be awkward and a bit clumsy.

MR. CRAMER: What was his best throw?

MR. RIDER: At Marquette last week he threw 231 feet 7½ inches. He rarely throws for distance in practice. As a matter of fact, he rarely throws over 150 to 175 feet in practice. It is my opinion that he should throw rather strong once during the early part of the week and of course again in competition at the week end. I have given that up this year in Bell's case because in the middle of the season he said, "Coach, I don't like to throw hard during the week, because when I do I don't feel the spring-like tension in my throwing arm that I want to feel when I am ready to throw in competition." He has done pretty well with this kind of practice, yet I think he is apt to lose his perfect timing if he does not throw a few fairly hard ones in practice during the early part of the week.

MR. G. L. DUKE (Grinnell College): What do you have him do early in the spring before you get him out-of-doors to get his arm in shape?

MR. RIDER: He played handball all winter, but injured his throwing shoulder doing it. He hit a high ball and had a muscle soreness in the tip of the shoulder all through the early spring. The

first time he threw was in a meet in Athens, Ohio. I only let him throw twice. It was a nice warm day and he hit 200 on his first throw. I finally broke down and took him to an osteopath against the advice of our university physician, in fact without his knowing it, and in three treatments he had every bit of soreness out of the shoulder and it has not bothered him since.

Strange as it may seem, the osteopath claims credit now for Bell's success. He wants his picture for one of their magazines. (Laughter) In addition to playing handball, he has been carrying a handball around with him and gripping it. He always carries it in his pocket. Then he has one of those spring devices with handles and he has been gripping that. He has been doing that since Christmas, together with the usual body building exercises, and before the snow was off this spring he was out with a javelin spearing it in the ground—throwing it out ahead of him a little bit, just to get the throwing position and to strengthen his throwing muscles. He always follows through completely with the body. His elbow has not been sore since he hurt it his first season. That injury, I think, had much to do with his success as a javelin thrower, because it taught him to bring his back into it much like the Finns do. When he learned to throw more with his back it saved his arm from the side action that so frequently ruins elbows.

MR. HAHN: Did he ever play football?

MR. RIDER: No, he won his numeral in basketball, but never went further.

MR. MERRIAM: Did you ever have any trouble with a javelin thrower who tends to pull down?

MR. RIDER: He did that all last year.

MR. MERRIAM: It is a common fault.

MR. RIDER: It was largely a matter of timing. When the throwing force was applied to the javelin, I thought he held on a little too long before releasing and that tends to pull the javelin down.

MR. HAHN: Do they not have a tendency to drop the elbow?

MR. RIDER: Possibly so. I think Bell did that when he first began throwing.

MR. NICHOLSON: Is throwing 150 feet for form enough practice for a 200

foot thrower?

MR. RIDER: I do not think so and I argued with Bell that it was not enough. I thought it was a mistake for him not to throw somewhere near his maximum at least once or twice during the week. Well, the fact that his shoulder was sore early in the season prevented his doing that. After he did get around in shape, he told me that he did not have the spring-like snap in his arm on Saturday if he threw hard during the week.

MR. MERRIAM: He probably had the form pretty well before this year.

MR. RIDER: Yes, he threw over 216 feet last year, but he was not at all consistent. He could not get the timing right until late in the season when he did his best throwing.

MR. MERRIAM: Do you not think that the average boy does not get the stance started properly? In order to get a complete throw, they pull down on it.

MR. RIDER: Yes. I think one of the things we have to be careful of it that a fellow does not run so fast that when he plants his right foot in the front cross, that he does not slide in any way, and lose balance. If his foot does slide, you will find that an inch of error there magnifies into a foot of error when it comes up to the end of the throwing arm. Any slip of the foot throws him out of timing and the error is magnified many times when you get up further.

Here is another little incident that you might be interested in: We started out using the regular field shoes with the heel spikes until we got on a soft field. Then I tried football shoes on him with rather long pointed cleats. It gave him a firm footing and support to the ankle which he liked very much, and so now he uses them all the time on soft ground. Up at Marquette the other day, at the Central Conference Meet, the field looked to be dry but it was pretty soft. He took the first four throws with his track shoes on, and then he went into the dressing room and got his football shoes, and his next throw went 231 feet $7\frac{1}{2}$ inches. He thinks the shoes had something to do with that. I think it did too because the ground was soft enough for the field shoe spikes to slide. The football shoes were firmly planted and everything went through perfectly.

I am personally very much in favor of

a high shoe, whether it is a football shoe or not. I think we should have shoes made to order for javelin throwers—a high top shoe with two spikes in the heel rather than one.

MR. NICHOLSON: What about this form throwing on Tuesday?

MR. RIDER: These pictures were taken throwing up to 175 feet. I have contended that his timing would not be quite right if he threw only easy ones in practice, but it seems to be making little or no difference with his best efforts.

MR. NICHOLSON: It is fine if he can do it.

MR. RIDER: He does not run as fast as I would like to have him. The thing we are working on now is for him to increase his speed and still time it perfectly. I think if he can run a little faster, perhaps he can add a few more feet to it. I believe speed will add the distance now.

MR. NICHOLSON: In that throwing position where he has both feet planted, does he throw against the left leg or is it bent quite a bit?

MR. RIDER: It is out practically straight with the toe pointing ahead.

MR. NICHOLSON: Does he pull against the leg?

MR. RIDER: As I say, it is a sort of a rocking step and then the hip comes into it. He adds that to the end of the throw.

MR. NICHOLSON: That leg is just a brace for a second.

MR. RIDER: Yes.

MR. NICHOLSON: He throws off the left foot and the right foot is off the ground.

MR. LITTLEFIELD: Did you pay any attention to elevation or lay in the javelin flight?

MR. RIDER: He had a tendency to throw too high and that is a reason he was pulling down. This year he started throwing too low. Just recently he has gotten it up about right. We did have to pay some attention to the elevation of the flight.

MR. HENRY SCHULTE (Univ. of Nebraska): I wondered whether we all agree on one thing. I have a peculiar thery about this delivering the javelin.

These boys often throw below the point. The air tricks the light tail and it nose dives for the ground.

Apparently Chick and George advocate having the point and tail follow each other. I think the point must be a little bit below the tail. In other words the throw is not a throw in line, but a little bit of a shove up. In doing that, you have the air pressure on the tail and it holds the nose up longer. It is not exactly following the line of flight, but the point is a little below the line of flight in the early part of the rise. Notice that tomorrow in the meet. You will find that true.

MR. WERNER: The Finns do that.

MR. SCHULTE: They push it into the air.

MR. WERNER: You get the javelin to the rear, come up here, and push it up. The Finns do that, I have found that to be true.

MR. BRUTUS HAMILTON (University of California): I would just like to point out that the form Larry Bell is using is a Swedish style of throwing, first used by Lundquist who threw it further than anybody has ever thrown it. He threw it 265 feet before he went insane. (Laughter) The record was disallowed.

Churchill used it. He was one of the first Americans to throw over 220 feet. We have also used the style at the University of California. It is a cross over hop. I am not convinced in my own mind that the Finns have the secret of javelin throwing. There are a lot of things about their style that I do not agree with. I am inclined to think that this style you have outlined there has more possibilities of carrying more speed into the throw than the Finnish style and I am willing to let the future decide just as soon as we have a few more boys out around 215 or 220 feet. I am quite certain that we will reach 250 feet with men like Bell if they care to continue for four or five years after graduating. It is a very sound form and simple to teach.

MR. NICHOLSON: Would you agree that those Finns use more speed than I would say nine out of ten Americans?

MR. HAMILTON: I do not think so.

MR. NICHOLSON: That is just my impression. Of course we do not work with

the javelin much. We are not nearly as skillful.

MR. HAMILTON: It is a comparatively new event in America.

MR. NICHOLSON: With the straight cross over maybe you could use more speed than with the hop step.

MR. WERNER: If you would discontinue this for awhile until we could see the movies, we might be able to see other factors that we might like to discuss.

PRESIDENT JOHNSON: We cannot spend a great deal more time on the javelin, but before we show these movies of Bell's particular style in this event, I would like to have Karl Schlademan of Washington State say something about this pole he calls a javelin and give us his excuse for it.

MR. SCHLADEMAN: I guess everybody here knows the difficulty with the javelin. We continuously break them up. I am going to give you the history of this thing for what it is worth. A little before last Christmas I became very disgusted with the Finn javelin and the others because I found they all broke. Maybe it was the man I had. I could not get results. I told the manual training man there that if he could make a javelin that would not break, he could quit worrying about his salary.

He got a duraluminum tube and commenced to experiment with light fernwood spruce. Any of you who sail boats know what they call a scarf. They have a footing on the mast which is used wholly to cut down weight. This runs up the side of the mast on a racing yacht. It will have half-a-dozen pieces of wood in it which are generally hollow. We found out with that that the boys would throw one of these poles ten feet farther than any other javelin. But they broke just as fast as we could make them. So, Professor Whiffen of the State College of Washington put a hickory footing on here like a billiard cue is footed and cut a hollow out on the inside a little, so you can regulate the size of the grip. There is not much whip in them at all.

I hope you will look them over. If anybody wants to experiment on this javelin, I will quote you his terms. You can send in your old points and he will fit them out for you. It takes a workman to

put a decent shaft into a footing. These poles are about an ounce over-weight.

MR. SCHULTE: How much would he charge for the mounting of the shaft if you sent in the whole point?

MR. SCHLADEMAN: About \$5.00 F. O. B. This wood is Alaska cedar. It is the only close grained soft wood I know of. I suppose that is because of the short growing season up near the Arctic Circle. He tried all the other soft woods up and down the West coast, and none are any good with the exception of that one, because all are large grained and break up. This is a close grained soft wood.

By extending the length of the footing and regulating the hole in it, you can make this shaft any size you want. This one happens to be fairly large on the back end to keep the whip out of it.

PRESIDENT JOHNSON: I think we have listened to one of the best presentations of the art of javelin throwing we have ever had in any of our meetings. I think we are very fortunate in having Chick Werner and George Rider here to tell us about it. In my opinion it is a really good example of an intelligent approach and contribution to our knowledge of the javelin throw and a very good presentation of coaching methods.

After this particular film is shown, we will have another silent film of the National Collegiate Meet of 1937 and then the film on the National A. A. U. Meet last year, which is a sound film and very interesting. Following that we will have our discussion on the high hurdles which promises to be another interesting event. Then we will have our business meeting and finally, adjournment.

... The movies were shown after which there was a five minute intermission ...

PRESIDENT JOHNSON: For our last discussion (on the high hurdles) we have a man who is unusually well qualified, having been a world's champion and a world's record holder, and also a developer of many fine hurdlers. He was among the first if not the first person to advocate—probably under Henry Schulte—the use of both hands forward in clearing the high hurdles. I believe we are very lucky today to have Bob Simpson here, who can tell us as much as any man I know, how to work on this event.

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HIGH HURDLING

MR. ROBERT I. SIMPSON: As you all know, after we get a man physically qualified—with the right size and speed, and the necessary limberness of the hips, the next thing to

consider is what style he should use in clearing the hurdles. He must have no waste motion—every movement must be with the idea of speed on the ground. We all know that the hurdler who spends the least amount of time in the air will win the race—everything else being equal.

Now, there are different schools of thought on hurdling. Some advocate both arms forward and others think one arm back and the other arm forward is better.

Then there are variations in between. Every top-notch hurdler has a little different technique of his own, but fundamentally they are much the same.

In those moving pictures that you saw there were some very good shots of Spec Towns (Georgia '37) who was one of the fastest hurdlers last year. He holds at present the world's record in the hurdles.

I do not know if it would be well or not to go into some of the requirements of a hurdler in regard to being supple or limber in the hips. I think that I can show you better than I can tell you. Do



ROBERT I. SIMPSON

you want that? (There were yells of "yes" from the audience)

This is the first test of a hurdler, because if he is not limber in the hips, you will have to give him a lot of exercises. If he is too stiff he will never make a top-notch hurdler. In the first place, if a hurdler cannot get the leg way up high and the toe turned up without falling over (sitting position) you will have to do something to help him. This is the first test to which I put them. (Mr. S. got up on the table and explained the form.)

I prefer to have my hurdlers run with the left leg over the hurdles first. So get on the table flat, and have the leg extended perfectly straight forward with the toe pointing up. The right knee is bent and the inside of the right leg is flat on the table—both knees about even. The right foot turns out from the body at right angles. When in this position, you will find a lot of them fall, or lean over to the left side.

To make it a little harder, lean forward in the same position flexing the front knee a little bit. Be sure to keep the toe pointing straight forward and up in the air, not over to the left, or to one side. Then come forward in the hips. If he can keep the leg perfectly straight and his chest down on his left leg, he is in pretty good shape. I am a little stiff now, because I have not done this very much lately. (Laughter)

I call the act of going over the hurdle, "diving over the hurdle." I call it that because it is a dive with one leg and two arms forward as you go over the hurdle. I know some of you will not agree with this. I know some of the coaches on the coast prefer only one arm thrust forward. You can overdo some of these things on certain individuals. You probably noticed in the pictures that Spec Towns hurdles with the right leg forward. He throws the right arm as far forward as he does the other one, but later the left one extends on out.

Tolmich, (Wayne, '37) as I remember, hurdled with the left leg over first, and although he did not throw the short (left) arm back, he let the right one come forward pretty well, and carried the left back pretty well.

Now, then, the way the back leg comes over the hurdle is very important. It

should swing over the hurdle from the time it leaves the ground in a continuous flowing motion with no jerk or lack of rhythm. It should sweep on over there and out quite a ways in front. I think some high school men have the idea that this trailing knee should come close to the hurdle. This rear leg must go high over the hurdle, or it is apt to strike it coming down.

One fault that you will see is that some hurdlers drag the rear leg too far behind trying to clear the hurdle. The result is that they lose a lot of time over the hurdle.

Then there is another common fault that you see in the beginner. Often he lets the leg drag behind him too long and when told to bring it over faster, he gives it a quick jerk forward and as a result the knee is brought too high in front of him, too quickly, and it gets in his way a bit. Then it comes down and hits hard on the ground. Sometimes in correcting one fault you cause another one, but you will just have to strike a happy medium to get the leg to come over with no jerky motion at all. Just use the steady, flowing sweep over the hurdles.

Now, the leading leg should come right straight up in front of you and forward over the hurdle. Once in a while you will see a long legged hurdler like Keller of Ohio State, who swings the leading leg a little bit in, over the hurdle. But most of them come right straight up over the hurdle as if they are stepping over something on the ground and right straight on down in a straight line.

Now, some boys have heard about the first leg straight over, and they think the leg should be extended straight, so they kick the leg up to get it straight. But, the knee should always be a little flexed. I maintain that with the proper dive over the hurdles, with your arms forward, that you need to make no conscious effort in getting that leading leg down to the ground in a hurry. If you do, it is going to cause you to jerk your head up. This will slow up your rhythm and get you to rock when you hit the ground.

In regard to arm action, it is important that the right arm come up when the left leg comes over. It should be about even or together. When the right arm comes back it should not come back

too violently to the rear or it will throw you in an off balance position and over to the right. Some men can do this and not turn but they are the exceptions to the rule. That right arm should come over the hurdle in a circular motion and back to the front in a running position.

I know several other fellows here that could probably do this a lot better than I can. There are Baskin, Nicholson Bresnahan, and two or three others. I would like to hear something from you fellows on this.

MR. YOUNG: When did you first use the two hands forward?

MR. SIMPSON: When I first started hurdling in the spring of 1914 as a freshman.

If it would help any to go into how we developed this two arm forward business, I will be glad to explain it.

I suppose that I was the most awkward hurdler that ever lived, while in high school. I did not have the least idea what a hurdler should do. I did not have a coach. I just went out there and jumped. Up until that time a good many of the hurdlers spread their arms to one side to hold their balance. I thought that was the proper form. I tried to do that but was not doing a good job of it.

I had another bad fault. I threw this leading leg around to the left instead of right straight up and over the hurdle. To correct that fault, when I got to the University of Missouri, Schulte put a high jump standard up beside the hurdle. That stopped me from throwing that foot around there. (Laughter) I had to do something else with it. Pretty soon it began coming up and over like it should.

I was still going too high, and bringing my arms out to the side, and the standard also stopped that left arm from going out to the side. I must have kept it in front because I did not throw it behind. Well, I was still clearing the hurdles too high, so he took the other standard and stood it on the other side. Then to make me keep down he placed an old time high jump cross bar about two feet above the hurdle. (Laughter) Then I had to keep down. I got in the habit of diving over the hurdle with both arms forward. The first thing I knew I was hurdling. Before that time I could not beat any-

body. I had a fair amount of speed. The only feature of my hurdling to begin with that we did not have to correct, was the action of the rear leg. For some reason or other it naturally came over as it should. All I had to do was to lift the toe up a little. That was the start of this dive over the hurdle with both hands extended.

I kept the left arm (the short arm) as near as I could to sprinting form. It went forward about to my ankle came back a little and as I came down went right into the sprinter's action. The right arm was extended past the toe about six inches. To help me dive I opened the right hand up and thrust it forward with the fingers extended. My chest would be on the thigh of my left leg.

Here is another fault I want to mention. In doing the dive a lot of hurdlers duck their heads too much instead of keeping head and eyes straight ahead. There should be no ducking motion of the head as you take the hurdles.

I wish some of you other fellows would ask some questions.

MR. MOORE: I would like to hear you go over the back leg again. I noticed in the picture that Towns seemed to be pulling the back leg through perfectly level over the hurdle, instead of bringing it up and over with a kind of a rotary motion.

MR. SIMPSON: It always looked to me that Towns was able to drag the knee and back foot a little farther behind him than any other real top-notch I ever watched. It did come over there pretty low, but it did not come high after he got over.

MR. NICHOLSON: Did you say to get the knee as high as possible? Do you mean just high enough to clear the hurdle?

MR. SIMPSON: No, I do not mean that it should brush the top of the hurdle. It should be up over about a foot. It should be brought up parallel.

Here is another thing. The other day I saw a picture of a head-on view of Walcott, this great hurdler from Rice that you have all been reading and hearing about and whom we will see in the next couple of days. I cut that picture out and the other day Pitch Johnson came through town, and I showed him an old

picture of myself. We put these two pictures together and they were almost identical in form. Is that not right?

PRESIDENT JOHNSON: That is true. There was a remarkably close resemblance. The only difference was that Bob's hand was in a vertical plane and Walcott's was flat.

MR. SIMPSON: The other day some of you may have seen the side view of Walcott in the paper. That one is almost identical except for the same little different action of the arm. Walcott's left arm was carried with the palm of the hand down, while I carried it with the palm toward the side of my left leg.

MR. HAHN: Your back was a little straighter than I saw it.

MR. NICHOLSON: I actually touched my knee to my chest. So do you, don't you, Bob?

MR. SIMPSON: Most of the time my chest was practically on my knee.

MR. NICHOLSON: Why do many hurdlers hit the hurdles with the trailing leg?

MR. SIMPSON: This is often done when the back leg is brought over with a jerk.

MR. BASKIN (Univ. of Georgia): Any time a man takes off too close to the hurdles he is going to do that.

MR. SIMPSON: That might possibly be. However, you do not usually find a man overrunning a hurdle unless he is a tall man like Percy Beard and is running on a fast track. Then he may have that trouble.

MR. BASKIN: Some take off six feet in front and land five feet on the other side. Those are the ones that have the most trouble dropping that foot and getting hurt.

MR. SIMPSON: I think a lot of inexperienced hurdlers make a conscious effort of throwing the leading leg down instead of diving over the hurdle, and keeping the chest and body well forward. You have to come down when you are in that position. You do not have to make any effort.

Especially where we have these 39 inch hurdles for high schools, you coaches should not overlook the tall, thin, gangling boy in preference to the other kind.

The sprinters may win for awhile, but with a little more time and patience on the taller boy, you will find that he will improve much more than the sprinter type of hurdler who is short and relies on speed rather than form. Correct form means a lot, although speed is a great requirement. When you can run 9.5 like Walcott, and 9.7 like Towns, combined with good form on the hurdles, you are not going to lose many races.

I believe the tendency nowadays with the 39 inch hurdles is that some awfully good boys are overlooked. They may be awkward at first. I know that hurdling requires a lot of patience, and a lot of working with the boys, and you cannot learn to hurdle in 15 minutes. It takes days, weeks, and years for some of them.

MR. NICHOLSON: I do not know what to do about my own son. He is six feet three inches tall and weighs 156 pounds. He jumps over six feet. He is not as loose in the hips as he should be, and not patient, but last year I started him on the hurdles and found that he got to the first hurdle in seven strides. I could not get him to take eight. I had him cut down his stride and come down in about three or three and one-half feet, and he has been terrible this year. It is too much for him. Now, he is immature. He will grow for the next couple of years. Should I change him or will he go out farther naturally? Should I let him go out farther for the landing?

MR. SCHULTE: Let him alone. Do not fuss with him too darn much.

MR. SIMPSON: I know that Nick, being an old hurdler, thinks his boy probably ought to be as good as he was right off the bat. He does not remember when he was awkward and had those troubles. I will say this for that boy. He is overreaching.

MR. NICHOLSON: We changed him to eight up to the first one; then we found if they had a fast track he was all right. Is it not true that several use seven strides to the first hurdle?

MR. BASKIN: Percy Beard did that.

MR. RYAN: I broke one man to eight because I did not think the fellow was tall enough, but he wanted to take the seven strides because some good hurdlers took seven strides.

MR. SIMPSON: Did you say that Per-

cy took seven strides always?

MR. BASKIN: He started with eight. He had to reach a little too much. He was six feet four inches.

MR. SIMPSON: He had long legs besides.

MR. BRESNAHAN: I found on most eight stride hurdlers that were closer to the first hurdle and carried over farther beyond the first hurdle. That was the only hurdle handled that way. The others—second to the tenth inclusive—the take-off was farther back and cut down much closer.

MR. SIMPSON: When we first began to hurdle we were getting closer to the first hurdle.

MR. BRESNAHAN: Most of them also moved the approach back and cut down to land so as to be closer to the hurdle. It was desirable because if taken quite rapidly, the extra three or four inches permitted time in which the rear leg could reach the elevation and start its whip across.

MR. SCHULTE: Speed plus the closeness to the hurdle is a vital factor.

MR. SIMPSON: I have found that the first hurdle is the hardest one to take correctly. It takes a lot of practice. If you take the first hurdle correctly with no reaching or chopping, the rest are easy. For that reason your hurdlers should spend quite a bit of time with fast work over three to four hurdles. If you get in the habit of practicing with less than three hurdles, you will begin to stop, or quit. You can run over four hurdles a great number of times and get more good out of it than if you run a couple of full flights.

MR. PHILLIPS: Have you found any relation between the amount of flexing exercises and the speed? By taking too many of these flexing exercises it may have a tendency to slow them up.

MR. SIMPSON: No. I think we talked about that this morning. We should make it a regular part of the drill. We should have special exercises for the hurdlers. I have never found that one of them ever caused any harm.

MR. NICHOLSON: I have found that we put in too much time on clearing the hurdles and not enough in between them. I claim from what I have experi-

enced with a boy who should have done something but did not this year, that we put in so much time on form that he came down too close to the other side. If you duck too much you are going to come down fairly close. If you have a man who has a sprinting stride of his own, vary your clearance from the sprinting stride rather than make him stretch between them. Do you get my point?

MR. SIMPSON: Yes.

MR. NICHOLSON: We are spending so much time on clearing the hurdles, that we get them to take too short a stride, cut down too quickly on the other side, so that they have to stretch the next stride and then it is not a normal sprinting stride.

MR. SIMPSON: That is right. That is one of the common faults of hurdlers. One of the strides of the hurdler is much longer than the others. It slows him up, so that he is not sprinting. The hurdler has to be running pretty near top speed. If the sprinter tried to run with the seven foot stride and then put in a nine or ten foot stride you can see what would happen.

MR. RYAN: You said something about training over one, two, and three hurdles. The race is over ten hurdles and it is not considered the best thing to run them over the ten at the normal stride I suppose. I read an article this year by Baskin about placing hurdles at odd distances. Could we find out something on that?

MR. BASKIN: We put the hurdles 12 yards apart. We had been five striding between them at ten. That cramped them. But if you move them out to 12, you will loosen them up a little between the hurdles and also give them a chance to work on form. Then after loosening up and working on form for ten or fifteen minutes, we moved them to 9 yards apart. There we increased the speed and were also able to work on form without having to strain the man to make each hurdle. He ran through at three-quarter speed and was still able to get the layout and approach to the hurdle at the maximum distance that we wanted.

MR. RYAN: Did he go through the full ten hurdles?

MR. BASKIN: No, only three hurdles with five strides.

Getting back to this take-off, Coach Schulte, I may be wrong, but I contend that any man that takes off seven feet six inches and comes down three feet six inches, while another man six feet six inches and four feet six inches, that the first man can beat the second over every hurdle, because he has to lay down harder on every hurdle. The man that takes a longer approach has to dive very hard to take the hurdle.

MR. NICHOLSON: I think there is something to this placing hurdles at different lengths. I think it is a good thing. Vary the hurdles. Put them nine and one-half yards one day and the next day put them up to ten and one-half yards. In the big races we have held, you will find fast tracks with the wind. The hurdler is up against it unless the stride instinct is built up. We get the boys in big races who lose them because they hit the hurdles. They can be trained to vary their stride by instinct so they will not hit them.

MR. BASKIN: They are rushing the knee, that is why they are hitting them.

MR. NICHOLSON: In the Olympic Games of 1912, I had to make up some ground. It was a fast track and I hit it going up. I was under pressure and now I think if I had practiced more running with the wind on fast tracks against competition, probably I would develop enough stride instinct not to have that fault. I was over-striding, that is the reason I hit it. You have to be able to meet all kinds of conditions.

MR. SIMPSON: I would rather run into a little breeze than to have one behind me.

MR. NICHOLSON: We cannot make the wind blow the way we want it.

MR. SIMPSON: I was lucky I never had to run with a real wind behind me.

MR. NICHOLSON: I did, many times.

MR. SIMPSON: I ran with the wind in my face and in rain. Another thing is that on a slow track, if a hurdler is smart, by practice under different conditions he will learn to take up the slack, or to reach a little more.

MR. JOHNSON: I think you fellows are exaggerating the point a little in saying that a hurdler can run better against the wind or on a still day than

with the wind. You are talking about different kinds of hurdlers. The fellows weighing 140 to 150 pounds are different. I had one that was a fair hurdler but he was so light he could not run against the wind, but he could beat the big fellows in running with the wind.

MR. NICHOLSON: A good hurdler ought to be able to run against all conditions. You have to give him practice to give him that stride instinct.

MR. SCHULTE: May I suggest that every hurdler ought to run out against the wind and with the wind. Have two ways to run and run with pressure.

MR. SIMPSON: If you have another hurdler let him run over the low hurdles, or run against a sprinter. You cannot get out by yourself and develop very well. You must have somebody to work against. Even if you have to handicap him. The only way to learn to run at top speed, is to do a lot of top speed work, like Schulte said, "With and against the wind." If it is raining, or if the track is muddy, let them get out and work on the hurdles. Maybe it will rain the day of the meet.

MR. NICHOLSON: What do you think about the five strides between hurdles? Sometimes I remember that in the old days we never did any of that stuff. I sometimes think it is wrong yet, because I think it takes the drive out of a man to take five hurdles in fifteen strides. I think there is too much form and not enough drive. My kids do it, but I have an idea that it is wrong.

MR. SIMPSON: That is my theory. There is too much of that done. I believe we see a lot of that after a fellow has really developed pretty well. You go to a big meet and you see these top notchers taking five or six strides going over, but he has learned a lot of hurdling. He does not hurdle that way. He is just practicing, limbering up. But the big mistake is that the high school boy watching them, thinks that that is the way to run the hurdles. They make a mistake there. They do not do enough top-notch running on the hurdles under pressure. When they start to use the normal speed, they go off form and do not know how to control themselves. This hurdling is a matter of very skillful balance of the body—being able to control yourself.

MR. RYAN: How often should a hurd-

ler go over all the ten hurdles?

MR. SIMPSON: Personally, I never run my men that far during practice. I work them over three or four hurdles. Of course, that is combined with a lot of sprint work.

MR. NICHOLSON: I disagree there. Did you ever know a fellow whom you thought was in good shape and the last two hurdles that he had to take looked like houses to him.

MR. RYAN: Why only work a fellow over three or four hurdles? When a fellow hits a hurdle it is usually the seventh, eighth, or ninth hurdle, not the first.

MR. SIMPSON: If he is not in condition he does.

If he is going to lose his form, there is no need to work him. Always stop him.

MR. NICHOLSON: I will agree with you here. There are certain muscles in the stomach that tire over ten hurdles until he has done three or four flights of those. Once he gets in shape he does not need the full flight during the week. But, until that time, he does need it. You take these boys that can run a good quarter. If you put them over the full flight of high hurdles, the first time they cannot take them. You have to send them through three or four times before you can cut them out.

MR. SCHLADEMAN: Do you run the boys over the full flight of hurdles about three times before the first race?

MR. SIMPSON: Yes.

MR. DUKE (Grinnell College): How do you tell a hurdler where to focus his sights? Where do you want him to look?

MR. SIMPSON: Always at the top of the hurdle. You look at the top of the hurdle because that is your aiming point. You are always looking at the hurdle ahead. You should never look at the ground.

MR. TOOTELL: How long is your first stride after landing compared with the normal running stride between the hurdles?

MR. SIMPSON: You are gathering speed at first. Naturally each stride is a little longer. After you get over three or four hurdles, your stride is just like a

sprinter's stride—even. That was with three strides. Not one short one and a stretch. I think you will find that true with all the top-notchers. There may be exceptions with the long legged boy who has to check a little. You cannot do much monkeywork in between there and keep up speed.

MR. LITTLEFIELD: There has been a little development in the hurdles from your time to the present. What caused the development, the form or speed of men?

MR. SIMPSON: Here is Towns, as I understand it can run 100 yards in 9.7. That is fast running. That is combined with excellent form. I would not advise every hurdler to try to imitate him too closely. I do not believe the average good hurdler could leave his rear leg as far back as he does. Now Walcott is very fast. I heard that he has run the 100 yards in 9.5.

When I was running we used the fifth second watch. I never beat 10 seconds in my life, although I could always do 10 seconds. Probably if we could do the 100 yards with a ten second watch, I might have done 9.9. But say that I could run 10 seconds flat and Walcott could do 9.5—that is .4 of a second faster. So it must be speed. The tracks also were not as fast or as good as they are now.

MR. NICHOLSON: I think it is the length of the legs that counts rather than the height.

MR. HAMILTON: I think we over-emphasize the length. I think it is possible for a man to be a 14.2 hurdler and still be five feet seven inches. I have seen a lot of them.

MR. NICHOLSON: What man have you seen under five feet nine inches do it under 15 seconds?

MR. HAMILTON: I have a man who cannot run the 100 in 10 seconds and he is five feet five and one-half inches. I saw a boy from Stanford run a race which was as fine a hurdle race as I ever saw—14.1 with the wind, and in the finals he was leading Percy Beard till he hit a hurdle. He was five feet seven inches, and he could not run 10 flat.

I will tell you what a short man can do in the hurdles that a long man cannot do. He can get down to running after he gets over the hurdles.

MR. NICHOLSON: He has a faster reaction.

MR. HAMILTON: I do not agree with the first stride after the hurdle. I think it should be short. The stride over the hurdle plus the short stride that follows should equal the two normal strides. If they do that they are smooth. I think that is the important thing. I do not think that arm action or other things over the hurdle are so important, as long as they are smooth.

Running between them counts just as much. It is no trouble to get to a high hurdle in three strides. A five foot six man can do it easily. They do not come down as close as big men.

MR. NICHOLSON: All things being equal, the tall man has the advantage, but the small man has the energy.

PRESIDENT JOHNSON: I think we could probably continue this discussion on the hurdles for some time yet, bringing up matters of form and style, but we cannot go on here forever. Unless Bob has something more he would like to mention to you gentlemen, I think we ought to call the hurdle discussion to a close.

MR. SIMPSON: It has been my observation that the hurdlers who have been the most proficient and who have won the most races—have been pretty good sized fellows. As I say there are exceptions. These little fellows come up and win now and then, but the large fellows win the most races over the longer period of time. Do not overlook the little fellow—try them all out.

PRESIDENT JOHNSON: Thank you very much, Bob, for your leadership in a very fine discussion. (Applause)

BUSINESS MEETING

Now we shall have our business meeting following which we will adjourn until next June. While this meeting is essentially for active members, others are invited to remain.

MR. SCHULTE: I would like to pay the track coaches a compliment on attending this meeting, on putting the stuff before the other fellows, to show what we have. It is the only way to build track and we are doing it.

I also feel that every now and then

some track coaches here in America happen to have misfortunes and I think that there should be a Committee in this Association consisting of the President, Secretary and Vice President who shall act as an executive committee to help out men who have difficulties, usually a matter of a job or something like that. I think that this group might, in the future, become a clearing house for fine coaches for institutions that need them.

PRESIDENT JOHNSON: It is a suggestion, if you wish to so move, we can put it to a vote.

MR. NICHOLSON: I put that in the form of a motion.

MR. RYAN: I second the motion.

MR. NICHOLSON: This is for finding ways and means of getting teachers and agencies for helping our men.

PRESIDENT JOHNSON: This particular Committee is to deal with tenure of office for coaches. The President will have the responsibility. If there is no discussion on that I will call for a vote.

... The motion was voted and unanimously carried ...

PRESIDENT JOHNSON: I think a report now from myself might be in order. I can say only in presenting a very informal report that I am pleased with the progress that this Association has made over the period of eight or nine years that I have been associated with it as a member. I think that is about the age of the Association which of course developed from the Western Track Coaches Association, started some 12 years ago at the time of the Drake Relays. The Association was given further impetus by an all week meeting held at Lincoln, during the days preceding the National A. U. Championships in 1931, at which time the first clinical notes of any discussion of this kind were made.

I have heard very many pleasing comments about the notes we have delivered to our members and we have had many compliments paid us by the Track Coaches Association in the East, (the Association of Collegiate Track Coaches of America) who say that we are ahead of them in things we do for our members. Whether or not this is so, we appreciate the compliment. I hope that my successor here will carry on as I said this morning in a better way than I have been

able to, and by somebody who will have a greater amount of time to give to the affairs of the National Collegiate Track Coaches Association.

Brutus, will you give us the report of the Secretary and Treasurer.

MR. HAMILTON: I have a very happy report to make. We are probably one of the very few organizations in the United States that is sound financially, having \$105.11, and owing \$2.10, leaving us a balance of \$103.01.

We have at present 111 members paid up. We have sent the notes of the meetings to those 111 members and I have received a number of letters from some of you men stating that you are well pleased with the notes, that it was a fine job of mimeographing, and that you were very happy to have them. Most of them feel they got their money's worth out of the discussion and notes. That concludes the report of the Secretary.

MR. TOOTELL: I move the report be accepted.

MR. HAYNES: I second the motion.

MR. SCHULTE: I would like to make this statement: We get our money's worth out of this Association when we hear the discussion and get the notes. We get more than our money's worth.

PRESIDENT JOHNSON: There is a motion on the floor that we accept the report of the Secretary-Treasurer.

... The motion was voted upon and unanimously carried ...

PRESIDENT JOHNSON: The next order of business concerns that of nomination of officers for 1938-39. The Chairman of the nominating committee is George Rider

MR. RIDER: Mr. President: The Nominating Committee met this afternoon and after considerable thought and deliberation arrived at a slate which I will present to you in a minute. Before that I would like to make one or two remarks. In the first place, since I have been coming to the National Collegiate Meets and since the organization of this Track Coaches Association, I have personally felt, and I think the rest agree, that it has been a non-political organization and should be so kept. In other words, it has been a group of men coming together with the idea of exchanging ideas and helping one another, and we

want to keep this organization truly a National Collegiate Organization.

With that in mind, we are about to submit a slate that we feel is a representation of that ideal and that principle of making it representative of the whole country, not any particular locality, but to bring in all sections, with the hope that it may be a National Organization in every sense of the word. We were advised to nominate two men for the Advisory Committee, which is composed of six men, two of whom retire each year, a new man being nominated and elected to serve three years. At present we have two for this year retiring, therefore making it necessary to nominate and elect two new members. We have two who are standing for one year and two for two years, and then the two nominees who are standing for the next three years. We nominate Harry Adams of the State University of Montana, and Charles Hoyt, of the University of Michigan for those two vacancies.

For the position of President we wish to submit the name of Fred Tootell, Track Coach at Rhode Island State College, feeling that the East should be represented in this Organization and also wishing to submit the name of one whom we all feel has done a lot of work in track and has a great deal of interest in the furthering of track. We also feel that he can do much for our organization of track coaches in his section of the country.

For Vice President we wish to nominate Karl Schledeman of Washington State College who represents the other section of the country, the far West. He has done a good deal of work on the Pacific coast. We all know he is doing a splendid piece of work in the field of athletics.

For Secretary-Treasurer, we felt that the most important job of all should fall to one who has contributed as much or more than most any other man in the Organization. He has not only served in this capacity before but for the past three years has served as President of our Organization and probably has more information and all the data at his fingertips than anyone in our Organization. In recognition of that fine service, both as a former Secretary-Treasurer, and as the President and Past President, we are nominating Pitch Johnson of Drake for Secretary-Treasurer. (Applause)

PRESIDENT JOHNSON: Gentlemen: You have heard the report of the nominating committee and the humorous remarks of its chairman. I believe it is customary to receive further nominations from the floor, if such is the wish of anyone.

MR. SCHULTE: I move their report be accepted.

MR. HAYNES: I second that motion.
... The motion was voted upon and unanimously carried ...

PRESIDENT JOHNSON: As is customary in all high class organizations, I am going to ask a couple of our former presidents if they are here, to escort the new president to the chair. George Bresnahan, Ralph Young, and Dean Cromwell will escort Mr. Tootell to the chair.

... Mr. Tootell assumed the Chair, while the audience applauded ...

PRESIDENT TOOTELL: I want to thank you very much. I will do all I can to help the Organization out.

I know some of us on the rules committee were hoping that someone would bring up questions on the rules this afternoon so we could have something to say, because we are meeting again tonight after the banquet and the evening meeting. If anyone has any suggestions to bring up, we will be glad to listen to them.

... A discussion on the ethics and practice of "starting" followed ...

PRESIDENT TOOTELL: I think a motion to adjourn is in order.

MR. HILL: I move we adjourn.

MR. JOHNSON: I second the motion.

... The motion was voted upon and unanimously carried ...

PRESIDENT TOOTELL: The meeting is adjourned.

... The meeting adjourned at five-fifty o'clock ...

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